

DOCUMENT RESUME

ED 351 772

EA 024 462

TITLE The First Condition of Education Report. A Report on Elementary and Secondary Education in Iowa.

INSTITUTION Iowa State Dept. of Public Instruction, Des Moines.

PUB DATE Nov 90

NOTE 70p.

PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS *Educational Assessment; *Educational Improvement; *Educational Quality; *Elementary Secondary Education; *Outcomes of Education; *State Norms; State Standards

IDENTIFIERS *Iowa

ABSTRACT

Information on the condition of K-12 education in Iowa during 1990 is presented in this document. To provide comparisons across time, comparable data for the 1985-86 school year are also presented. Following the introduction, the first section describes statewide initiatives for improvement and quality assurance and for increased educational opportunities. The following sections describe the status of education through three types of indicators: (1) input, such as funding, human resources, and enrollment; (2) process, such as curricular offerings; and (3) output, such as student achievement data. Each section begins with a summary of the major findings, an introduction to the topic, and a detailed description of the major findings. The final section provides an overview of the history of the state's educational system. Appendices contain additional data on the major findings. Thirteen tables and 28 figures are included. (LMI)

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The First Condition of Education Report



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A Report on Elementary and Secondary Education in Iowa

Iowa Department of Education 1990

EA 024 462

The First Condition of Education Report

Iowa Department of Education
November 1990

State of Iowa
DEPARTMENT OF EDUCATION
Grimes State Office Building
Des Moines, Iowa 50319

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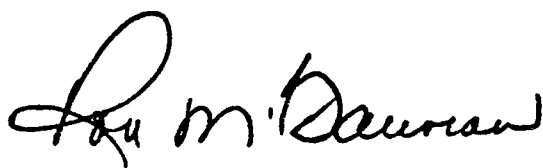
The Department provides civil rights technical assistance to public school districts, nonpublic schools, area education agencies, and area schools to help them eliminate discrimination in their educational programs, activities, or employment. For assistance, contact the assistant chief, Bureau of School Administration and Accreditation, Iowa Department of Education.

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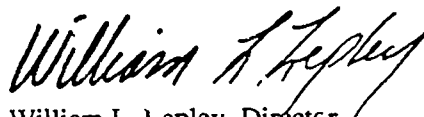
Challenges. Iowa education faces them as never before. President Bush has challenged each of the states to meet six national education goals by the year 2000. Both Iowa and the nation face the continuing challenge of preparing our children and young people to live and work in the 21st century. And, here in Iowa we are challenging ourselves to transform our already good education system into one that is truly world class.

As you review this first report on the condition of education in Iowa and see the rich diversity of our state's education system, you will be able to appreciate the challenges our state faces in providing every Iowa student with a quality education.

This report is designed to provide you with sound information about where Iowa now stands so that we can make informed decisions together to enhance and strengthen our education system; to benefit Iowa's greatest asset, its people; and to make "Iowa education" and "world-class education" synonymous.



Ron McGauvran, President
Iowa State Board of Education



William L. Lepley, Director
Iowa Department of Education

Acknowledgments

The Department of Education wishes to acknowledge the special contributions of the many people who contributed to this first report on the condition of education in Iowa.

The individuals listed below served on a task force to make recommendations about the content of a proposed "condition of education" report and the process of gathering the needed information. They brought to the effort both their individual expertise and the perspectives of the constituencies they represented: local school districts, area education agencies, research and development specialists, testing specialists, the legislature, educational organizations, and the Department of Education.

The task force's final report, presented in December 1989, significantly influenced the content of this first Condition of Education Report. The Department thanks all task force members for their valuable contributions to this project. Special acknowledgment is extended to Peter Flynn, superintendent of schools in Davenport, who provided outstanding leadership as chair of the task force. The Department also greatly appreciates the many hours of service and insight provided by the Condition of Education Steering Committee and the Research and Development Subcommittee.

In addition, appreciation is expressed to the many staff members of the Department of Education who contributed to this report.

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Introduction

This first report on the condition of education is a comprehensive picture of what exists now in Iowa education. Only by knowing where we are now can Iowans collectively decide where we want to go educationally and how best to get there.

Information on prekindergarten through grade 12 is presented in this report; data on the community colleges is not presented but will be in future editions. The most current information available is included. Data are described according to district enrollment categories when appropriate. To provide comparisons across time, comparable data for the 1985-86 school year are also presented.

This five-year span was selected for comparison purposes because it was a period of numerous statewide reform initiatives, including new standards for school accreditation, increased accountability requirements, a program to increase teachers' salaries, growing use of inter-district sharing agreements, and implementation of the State Board of Education's five-year plan. Several of these activities are profiled in the section on reform initiatives.

As recommended by the Condition of Education Task Force, the report describes the status of education through three types of indicators: input, process, and output.

- Input indicators, such as funding, human resources, and enrollment, describe the resources available to Iowa's education system. These are somewhat controlled by outside constraints.
- Process indicators, such as curricular offerings, describe what happens to those resources. Process indicators can be varied to an extent by school districts.
- Output indicators, such as student achievement data, describe the results that occur with students.

The indicators were selected based on several criteria, including reliability, validity, availability, feasibility of collection, and potential impact on educational policy. In this first year, primary emphasis has been given to summarizing data collected through the state's annual data collection process. The task force also recommended that efficient methods be explored to collect information regarding additional indicators without placing undue burden on local school districts, and that the contents of the report be reviewed and modified periodically. These recommendations will be considered as future editions are prepared.

Each section begins with a summary of the major findings and an introduction to the topic; a detailed description of the major findings follows.

The final section of the report is an overview of the history of the state's educational system. Appendices providing additional information on the major indicators conclude the report.

Reform Initiatives

Nationally, education has received increased public attention in the past 10 years. Public and professional demands for quality programs and services have stimulated examination of current practices and exploration of alternatives to improve education. In Iowa these efforts have resulted in initiatives to improve existing programs and ensure their quality and to increase educational opportunities for students. Because many of the initiatives were implemented during the five-year period of this report, they provide additional context to help interpret the indicators.

IMPROVEMENT AND QUALITY ASSURANCE INITIATIVES

Standards for Approved Schools

Legislation enacted in 1985 required the State Board of Education to develop and adopt new standards for approved schools, and to provide technical assistance to public school districts and nonpublic schools to comply with them by July 1, 1989. In response the State Board appointed a task force to review existing standards and current literature on effective schools and learning environments and to develop recommendations for new standards. Advice was sought from representatives of higher education, area education agencies, school boards, administrators, teachers, parents, students, business and industry, labor, government agencies, associations, and community representatives. The task force recommendations were approved by the State Board in 1987. To facilitate implementation, staff members of the Department of Education visited every public school district and nonpublic school between 1987 and 1989, developed guidelines for interpreting the new standards, and conducted workshops and informational meetings. All accredited nonpublic schools and public school districts were reviewed against the new standards in 1989-90.

Accreditation

Accreditation, a process to ensure that Iowa public school districts and nonpublic schools comply with the school standards, began with legislation enacted in 1985 and 1987.

The process has two phases. The first phase consists of annual monitoring by the Department of Education. Public school districts and accredited nonpublic schools are required to annually complete accreditation compliance forms and file them with the Department. In addition, staff members of the Department conduct at least one visit each year to every district and accredited nonpublic school to review their educational programs and the information in their compliance forms.

The second phase of the process is implemented if deficiencies in meeting the standards are suspected. An in-depth study is conducted by an accreditation committee and a written report is prepared. If deficiencies are identified, a plan to correct them is developed by the Department and the district or school. A follow-up visit to verify compliance follows. If the deficiencies are not corrected, the State Board may merge the district with one or more adjoining districts.

Accountability Requirements

Both the Code of Iowa and the administrative rules of the Department of Education require nonpublic schools and public school districts to identify needs, plan, set student achievement and other goals, assess their progress in meeting the goals, and to be accountable by reporting their results to their communities and the Department of Education. Although a statewide report based on this information is not required, the documentation of compliance with the accreditation standards and the identified local needs and goals are used in state-level planning.

The comprehensive planning requirement is intended to result in school improvement by coordinating planning and goal setting with curriculum development, staff development, and other development and implementation processes. Through this process, schools and communities can integrate local needs, existing practices, mandates, and their human and financial resources into an effective school organization.

Educational Excellence Program

In 1985-86, the impetus for school reform and restructuring in Iowa was building. Through the collaborative efforts of the governor, the legislature, and the education community, the Educational Excellence Act was enacted in 1987. Designed "to promote excellence in education," the \$91 million program consists of three major phases.

Phase I was designed to recruit quality teachers by raising the starting salary for full-time teachers to \$18,000. In the first three years of implementation, over \$33 million was spent to ensure that teachers in public school districts and area education agencies earned a minimum salary of \$18,000 or its equivalent. Funding for Phase I continues near the first-year level.

Phase II funds were established to retain quality teachers by increasing the salaries of experienced teachers. In each of the first three years, over \$38 million was used by school districts and area education agencies for this purpose. Beginning with the 1991-92 school year, Phase II allocations will increase at the state allowable-growth rate.

Phase III was intended to enhance the quality, effectiveness, and performance of Iowa's teachers. Through collaborative planning, school districts and area education agencies could develop plans to increase teachers' salaries, improve the educational program, and meet educational needs. Teachers could earn supplemental pay for participating in additional instructional work assignments or for seeking additional training and could earn performance-based pay by demonstrating superior performance. During the first three years of implementation the number of districts and area education agencies using performance-based pay plans increased from 50 to approximately 175.

Approximately 92 percent of all Phase III funds were expended directly to teachers as salaries, social security and pension benefits, tuition and travel reimbursement, and conference/workshop registration fee reimbursement. Beginning in 1991-92, districts and area education agencies which implement comprehensive school transformation or performance-based pay plans will be eligible for an increase in their Phase III allocation. The increase will be based upon the state allowable-growth rate.

INITIATIVES TO INCREASE EDUCATIONAL OPPORTUNITIES

School Reorganization, Dissolution, and Whole-Grade Sharing

Economic conditions during the past 10 years have caused populations in rural areas to drop rapidly. Associated declines in school enrollment accompanied by new and higher accreditation standards have encouraged school districts to explore alternative methods of school organization. These alternatives include reorganization, which merges two or more districts and requires a vote of the citizens; dissolution, which breaks a single district into two or more sections, assigns them to neighboring districts, and requires a vote of the people; and whole-grade sharing, a contractual agreement between two or more districts that puts the entire program of selected grades together and requires only actions by the respective boards of education.

In 1985-86, 431 of the 436 school districts maintained operating high schools. During that year 10 districts operated under five separate whole-grade sharing agreements. In 1989-90 only 389 of the 431 school districts maintained operating high schools. Eighty-four districts combined programs through whole-grade sharing contracts. All of these relationships combined at least high school grades, and some districts combined all or some of the elementary grade programs.

The Department of Education helps districts considering alternative organizations by conducting feasibility studies, disseminating information about reorganization, and informing the public about the process. Prior to 1985-86 Department staff annually conducted one or two reorganization studies, involving two or four districts. In the past three years almost 40 districts per year have requested assistance.

Open Enrollment

Since the early 1980s the Iowa General Assembly has shown increasing interest in making broadened educational opportunities available for elementary and secondary students. In 1989 a parent choice bill was passed, making choice among public school districts available to parents and guardians with only a minimum of restrictions.

The majority of the provisions for open enrollment of pupils did not become available until the start of the 1990-91 school year. Certain open enrollment options, however, were available for the 1989-90 school year.

The total number of school districts with students using some form of open enrollment for the 1989-90 school year was 223, or 51.74 percent of the 431 public school districts in the state. The 458 students represents less than .1 percent of the total certified enrollment for the 1989-90 school year.

Early Childhood Education

In response to changing societal needs, the State Board of Education expressed its commitment to improving the education of Iowa's young children in its 1986 five-year plan by directing the establishment of a task force to study the issue and make recommendations. Based on the task force's report, presented in 1987, the State Board and the Department of Education issued a position statement to give statewide direction to efforts to develop and improve prekindergarten through third-grade programs. The statement provided guidelines on instructional personnel, student eligibility and placement, program structure and curriculum, student assessment, and cooperation among home, community, and school.

The goal of the Board, the Department and the Iowa General Assembly is a coordinated, statewide system of early childhood programs. Several major steps have been taken to reach that goal:

- The Iowa Child Development Coordinating Council was established in 1988 to promote child development services for at-risk 3- and 4-year-old children. Council members represent state government agencies, area education agencies, universities, the medical profession, and parents. The Council makes recommendations concerning state-level policy, coordinates program development statewide, awards grants, and provides technical assistance and training.
- Early childhood advisory committees were established in each public school district to examine local needs and make programming recommendations to their local school boards, the Department of Education, and the General Assembly. The committees examined Head Start programs, programs for at-risk students, public and private preschool programs, child care programs, and parent education and support programs. As of August 1990, the Department of Education had received study results from almost 83 percent of public districts and will use the information in state-level planning.
- The Iowa General Assembly appropriated \$8.8 million to strengthen programs for young children and for children and youth at risk of school failure. The funds were distributed as grants to 74 programs selected by the Child Development Coordinating Council from 283 applications.

School Finance Reform

Beginning July 1, 1991, Iowa school districts will be funded under a new school finance plan. Iowa's current plan is one of the oldest foundation plans in the United States. The plan, developed in 1967, was modified in 1972-73 and has been basically unchanged in concept. The three basic concepts of the formula have been that budgets should be determined based upon district enrollment; that the state should guarantee an amount of money supporting each student; and that a minimum tax rate would be required in each district.

The current foundation plan originally equalized expenditures and tax rates to support education. The rather dramatic enrollment decline experienced by the majority of Iowa's public school districts during the 70s and 80s was the impetus for several modifications in the plan. To ensure growth and stability in budgets, adjustments were made to the number of students used to determine a budget. These adjustments became known as "phantom" pupils and resulted in a larger disparity in per-pupil expenditures among districts.

Several years of legislative study and the work of a Department of Education Ad Hoc Task Force on School Finance, created at the request of the Governor, produced a new way of financing districts.

The new plan is built on many of the goals of the existing plan--equity, stability, and predictability. It provides for recalculations of each district's cost per pupil and a recalculation of the state cost per pupil. Budgets will continue to be generated using the district cost and enrollments. Budget enrollments, however, will be based on actual enrollment plus adjustments based on the amount of enrollment decline over the last five years. District cost per pupil will be brought up to the state cost or down to within 10 percent of the state cost. In addition, a new instructional support program levy will provide an opportunity for districts to increase their budgets by up to 10 percent.

The finance plan will be phased in over three years and does not provide a budget guarantee after the third year. Current programs such as the dropout and gifted and talented program will continue as under the current law. The current site and schoolhouse levies will be combined in a physical plant and equipment levy, which will expand the use of and access to the levy. The role of the School Budget Review Committee was expanded to include the authority to require districts adopt generally accepted accounting principles. The committee was also provided with \$8.5 million for transportation assistance aid and special needs adjustment aid. The state will increase its commitment to a higher foundation level by increasing the level until it reaches 85 percent. The new finance plan also provides for a property tax adjustment so that taxes will not be greater under the new plan than they would have been under current law.

Overview of Indicators

PUPIL OUTCOMES

- Composite scores on the Iowa Tests of Basic Skills (grades 3-8) and the Iowa Tests of Educational Development (grades 9-12) have shown steady increases over the last five years.
- Iowa's average composite score on the ACT college entrance exam remained fairly constant between 1985-86 and 1988-89 and well above the national average. In 1988-89, Iowa's average composite ACT score was 20.1, while the national average was 18.6.
- Average composite SAT college entrance exam scores in the mathematics and verbal areas have declined slightly but remain well above the national average.
- Approximately 86 percent of Iowa ninth graders go on to graduate from high school. This percentage has decreased slightly from about 87 percent over the last five years. About 70 percent of all dropouts come from districts with enrollments of over 2,500, while these districts enroll only about 45 percent of all students.
- Approximately 65 percent of all high school graduates continue on to postsecondary education or training. This percentage has been increasing over the last five years.

ENROLLMENT

- In 1989-90, 478,210 students were enrolled in Iowa's 431 public school districts. Enrollments in grades 1-7 increased between 1985-86 and 1989-90, while enrollments in kindergarten and grades 8-12 decreased, resulting in a total decline of more than 1.5 percent, a loss of almost 7,500 students. Public school enrollment is projected to decline another 3.8 percent over the next five years.
- Nonpublic schools enrolled 46,033 students in 1989-90, a decline of more than 6 percent (almost 3,000 students) from 1985-86. Nonpublic school enrollment is expected to grow slightly over the next five years.
- Prekindergarten enrollment grew 57.8 percent between 1985-86 and 1989-90.
- Iowa's minority student population is growing slightly. In 1985-86, 95.3 percent of Iowa students were white, 2.54 percent were Black, 1.1 percent were Asian, .84 percent were Hispanic, and .22 percent were American Indian. In 1989-90, 94.6 percent were white, 2.7 percent were Black, 1.3 percent were Asian, 1.1 percent were Hispanic, and .3 percent were American Indian.

SCHOOL FINANCE

- In 1988-89, total operating expenditures for K-12 education were almost \$1.78 billion, an increase of over 20 percent from 1985-86. In 1988-89, state revenues accounted for 51.6 percent of school funding, local revenues accounted for 45.5 percent, and federal and area education agency revenues together accounted for about 3 percent. In 1985-86, state revenues accounted for 43.9 percent of school funding, local revenues for about 53 percent, and federal and intermediate revenues for about 3 percent.

- Of total 1988-89 operating expenditures, 68.4 percent was spent for salaries, 13.6 percent went for benefits, 9.5 percent went for purchased services, 5.3 percent for supplies, 2.5 percent for capital outlay, and .7 percent for other expenses.
- Analyzed another way, of total operating expenditures in 1989-90, 67.4 percent went for instruction, 10.2 percent went for administration, 10.6 percent went for operation and maintenance, and 11.8 percent went for other support services.
- On average, Iowa school districts spent \$3,720 from their operating fund per student in 1988-89, an increase of 22.7 percent from the 1985-86 figure of \$3,032.
- Bond issues generated over \$63.8 million for 22 public school districts in 1988-89, a substantial increase from the \$2.6 million generated for four districts in 1985-86.

STAFF

- Iowa's average public school teacher is a 40-year-old, white female earning about \$27,940 a year. The average teacher holds a bachelor's degree and has about 15 years of experience in education and about 11.5 years of tenure in her present district. Teachers in districts with larger enrollments are more likely to earn higher salaries and to have more experience in education.
- Iowa's average public school principal is a 46-year-old, white male earning about \$42,460 a year. The average principal has earned at least a master's degree, has about 22 years of experience in education and about 13 years of tenure in his present district.
- The average Iowa public school superintendent is a 49-year-old, white male earning about \$50,800 a year. The average superintendent has earned at least a master's degree and has about 24 years of experience in education, including about eight years in his present position.

PROGRAM

- The average number of curriculum units offered in Iowa high schools in 1989-90 was 59.9, an increase of 10.5 percent from the 1985-86 average of 54.2 units. A wide variation existed in average units offered in districts of different enrollments. In 1989-90, districts enrolling 7,500 or more students offered an average of 154.4 units, which was almost 3.5 times more than the average of 46.3 units offered in districts enrolling less than 250 students.
- Enrollments in advanced courses for 1989-90 include:
 - Calculus: 2,358 students, or an estimated 7 percent of 12th graders
 - Trigonometry: 4,392 students, or an estimated 14.0 percent of 11th graders
 - Chemistry: 17,945 students, or an estimated 58.1 percent of 11th graders
 - Physics: 9,043 students, or an estimated 28.7 percent of 11th graders
 - Foreign Language: 62,268 students, or 46.9 percent of 9th through 12th graders.
 Since 1985-86 the percentage of students enrolled in each of these advanced courses has increased.

Pupil Outcomes

- The percentage of graduates pursuing postsecondary education and training increased between 1985-86 and 1989-90. The rate of graduates pursuing higher education and training is higher in smaller districts than in larger districts.
- Composite ITBS scores for students in grades 3 - 8 were higher in 1989 than in 1985 and, in general, showed steady increases through the early 1980s then slowed down and leveled off. Average composite ITED scores for students in grades 9-12 increased steadily between 1985-86 and 1989-90.
- Average composite ACT scores remained fairly constant between 1985-86 and 1988-89, and well above the average for the nation. Average composite SAT scores for mathematics subtests declined slightly from 1985-86 to 1988-89 but remained well above the national average. Composite scores for verbal subtests declined from 1985-86 to 1989-90 but remained above the national average.
- Attendance rates remained relatively constant between 1985-86 and 1988-89, at approximately 95 percent.
- The statewide dropout rate increased slightly from 2.29 percent in 1985-86 to 2.61 percent in 1988-89. A higher percentage of 11th grade students dropped out than any other grade level in both 1985-86 and in 1988-89, followed closely by 12th grade students. In both 1985-86 and 1988-89 about 70 percent of all dropouts came from districts with enrollments over 2,500. These districts account for about 45 percent of all 7-12 enrollees.

The information below on student achievement includes the number of students who successfully complete regular school programs and earn high school diplomas, as well as the results of student achievement tests. Although Iowa does not have a mandated statewide assessment program, over 95 percent of all nonpublic schools and public school districts voluntarily participate in the Iowa Testing Program (ITP), a professional unit within the College of Education at the University of Iowa. ITP personnel conduct two standardized testing programs as a service to the schools of Iowa. The Iowa Basic Skills Testing Program, which uses the Iowa Tests of Basic Skills (ITBS), serves the elementary schools of Iowa. The Fall Testing Program for Iowa High Schools uses the Iowa Tests of Educational Development (ITED). Results of the American College Test (ACT) and the Scholastic Aptitude Test (SAT), standardized college entrance exams, are also reported. Attendance and dropout rates are also examined.

STUDENT ACHIEVEMENT

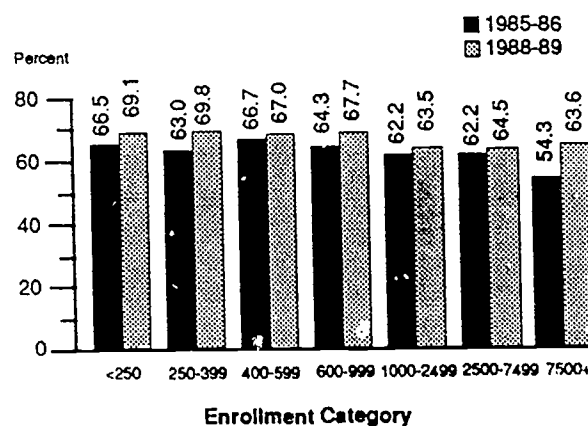
High School Graduates

According to the U.S. Department of Education an estimated 86.5 percent of the students who were in the 9th grade in 1982 subsequently graduated in 1985. This rate remained fairly constant for the class of 1988 (85.8 percent).

The Iowa Department of Education conducted a study in 1985-86 to determine the status of 1985 Iowa high school graduates. The study found that 61.4 percent of the 1985 graduates who responded were enrolled in some type of postsecondary education or training. The proportion varied across enrollment categories (Figure 1). The highest proportion was reported in districts with enrollments between 400 and 599 (67.7 percent). The lowest percentage was reported for districts with enrollments over 7,500 (54.3 percent).

A follow-up study of the class of 1988 indicated that 65.3 percent of 1988 graduates who responded were enrolled in

Figure 1
Percent of Graduates Pursuing Postsecondary
Education/Training
1985-86 vs 1988-89



Source: Annual Guidance Surveys
Department of Education

postsecondary education or training. This is an increase of 6.4 percent. At least 63.5 percent of the graduates in each enrollment category were reported in postsecondary education or training. An average of more than 69 percent of graduates in districts with enrollments under 400 were enrolled in postsecondary education or training.

Student Achievement Tests

ITBS. The Iowa Test of Basic Skills (ITBS) is a collection of tests designed to measure pupil growth in a variety of areas of the school curriculum in grades K-8. The five main areas included for most grades are vocabulary, reading, language (including spelling, capitalization, punctuation, and usage), work-study (visual and reference materials), and mathematics (concepts, problem solving, and computation). In grades K-2, tests in listening and word analysis are included; in grades 3-8, tests in social studies and science are available as well.

The average scores shown are composite scores for grades 3-8. In these grades, the composite score is the average of the five

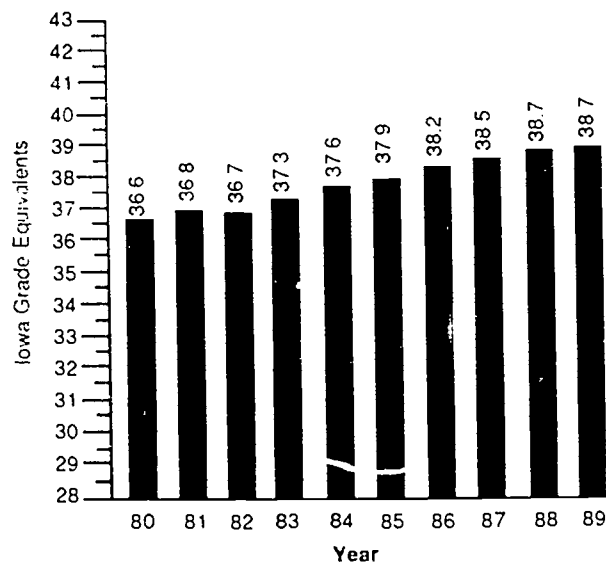
main scores: vocabulary, reading, language, work study, and mathematics. Thus, the composite score is an indicator of overall achievement.

Since schools in Iowa give the ITBS at various times of the year, the scores were adjusted to show how students would have scored if everyone had been tested in late January of each year. Further, the grade-equivalent scores used in these figures tell how pupils performed based on a school grade and the number of months in that grade. For example, a grade-equivalent score of 45 tells how the typical Iowa pupil finishing the fifth month (January) of grade 4 would score.

Achievement in the areas included in ITBS composite scores improved steadily through the early part of the 1980s. Then improvement slowed down and leveled off in each grade. The figure for each grade shows how the typical pupil in each grade scored in a given year, but does not tell how well the highest achieving pupils scored or how poorly the lowest achieving pupils scored in a given grade. In summary, when Iowa pupils are compared with their Iowa peers from year to year over the past decade, ITBS average scores have risen and then stabilized.

Figure 2

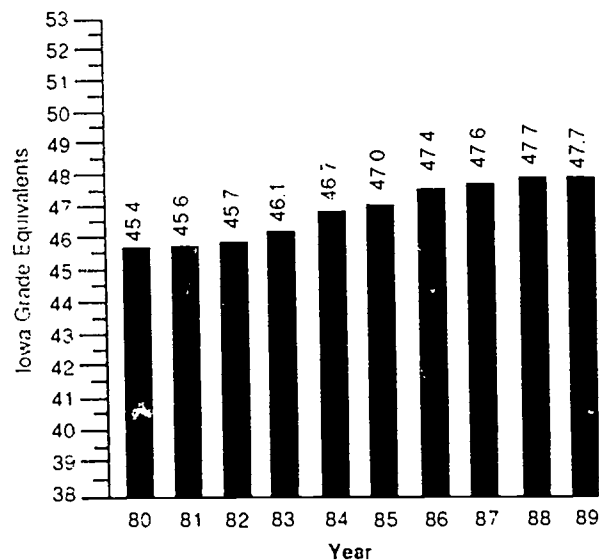
Comparisons of Iowa
Median Midyear Performance
Iowa Tests of Basic Skills
Composite Scores
Grade 3
1980 - 1989



Source: Iowa Testing Programs
University of Iowa

Figure 3

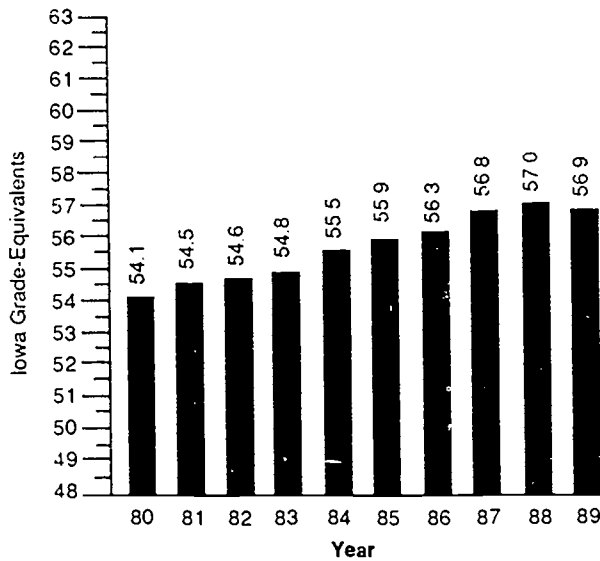
Comparisons of Iowa
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Composite Scores
Grade 4
1980 - 1989



Source: Iowa Testing Programs

Figure 4

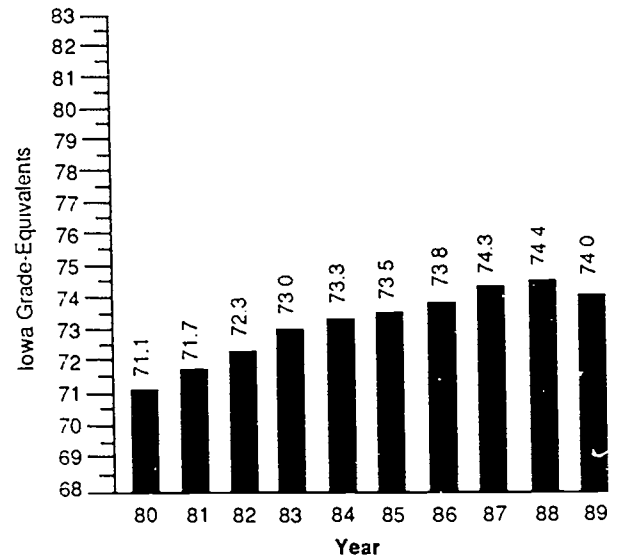
Comparisons of Iowa
Median Midyear Performance
Iowa Tests of Basic Skills
Composite Scores
Grade 5
1980 - 1989



Source: Iowa Testing Programs

Figure 6

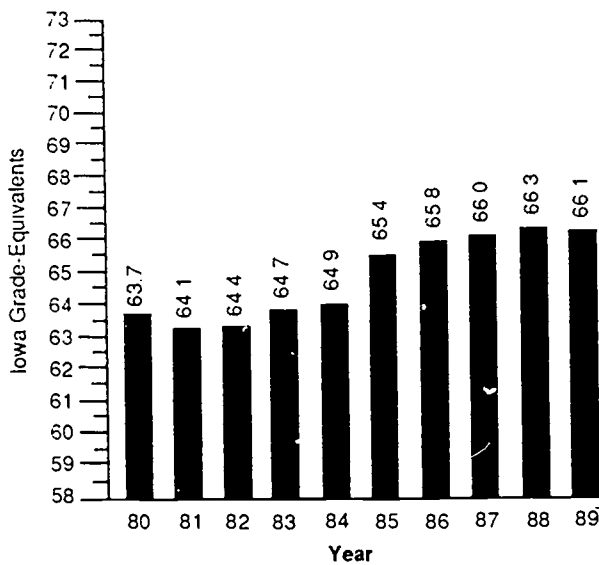
Comparisons of Iowa
Median Midyear Performance
Iowa Tests of Basic Skills
Composite Scores
Grade 7
1980 - 1989



Source: Iowa Testing Programs

Figure 5

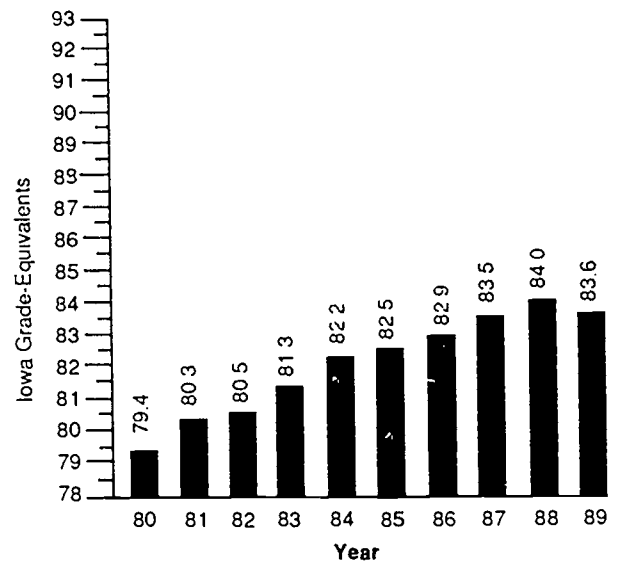
Comparisons of Iowa
Median Midyear Performance
Iowa Tests of Basic Skills
Composite Scores
Grade 6
1980 - 1989



Source: Iowa Testing Programs

Figure 7

Comparisons of Iowa
Median Midyear Performance
Iowa Tests of Basic Skills
Composite Scores
Grade 8
1980 - 1989

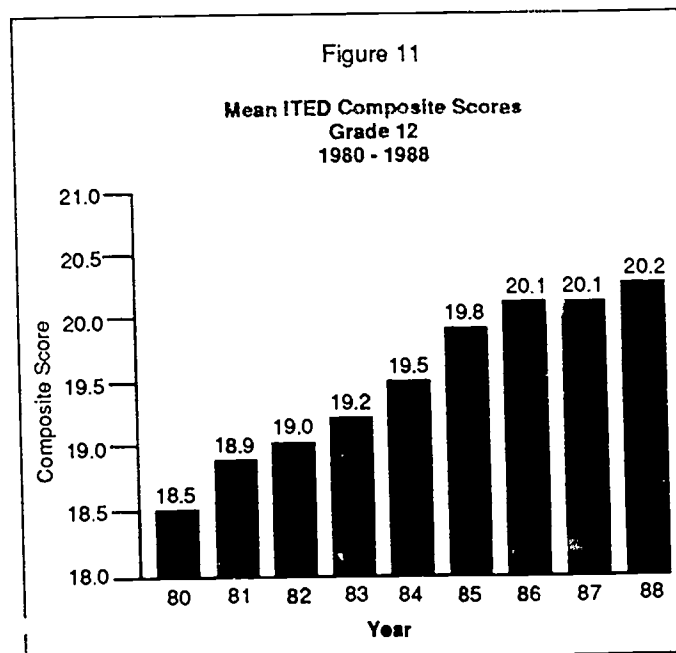
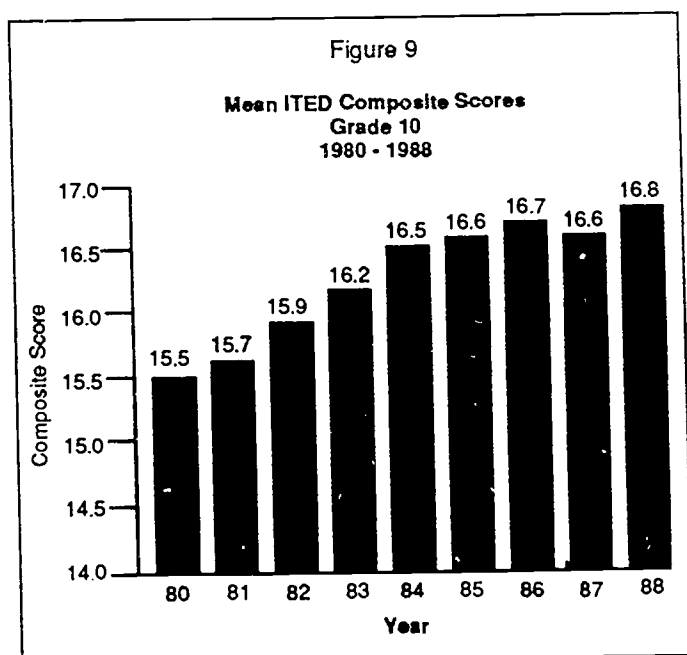
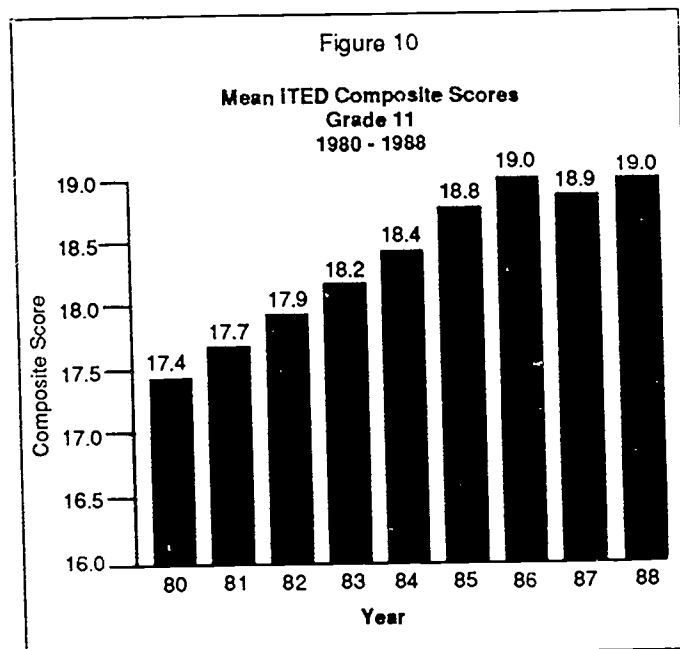
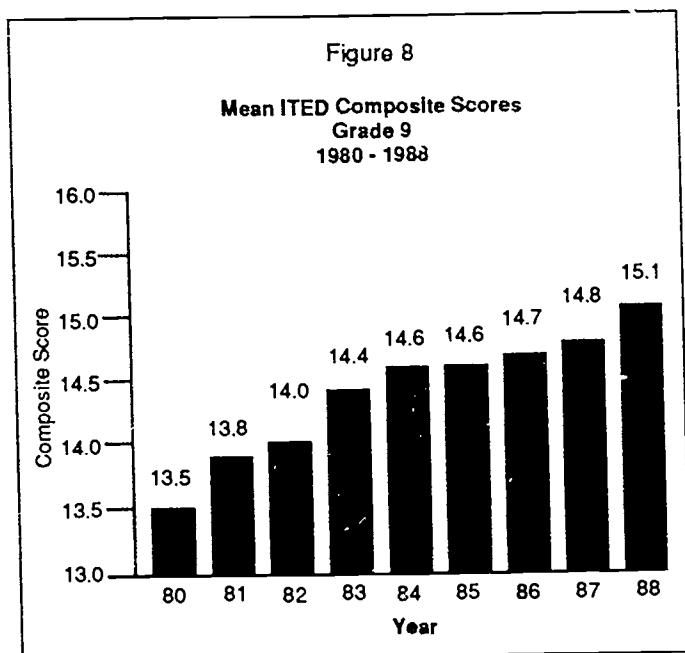


Source: Iowa Testing Programs

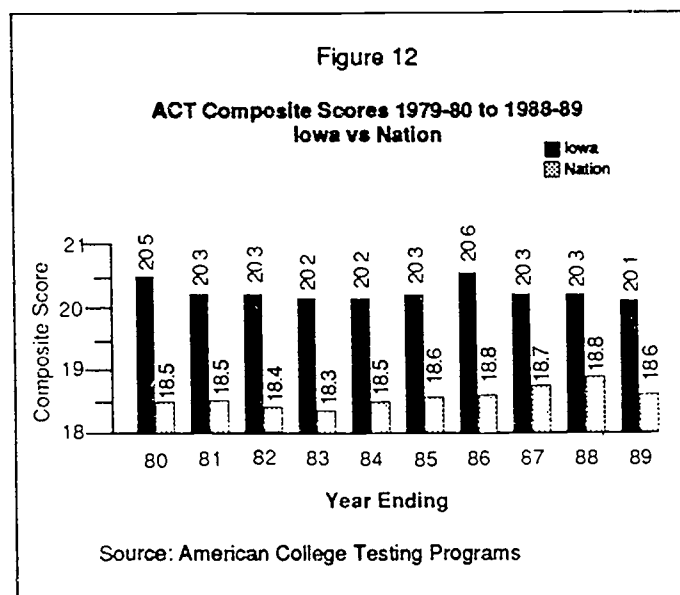
ITED. The Iowa Tests of Educational Development (ITED) are a battery of seven tests measuring skills that are important in adolescent and adult life. These skills include recognizing the essentials of correct and effective writing, solving quantitative problems, critically analyzing discussions of social issues, understanding nontechnical scientific reports, and recognizing such methods of scientific inquiry. The ITED composite score is based on the scores obtained from all seven tests and is an

indicator of the level of overall achievement. ITED composite scores range from 1 to 38.

Average ITED composite score by grade for Iowa students participating in the Fall Testing Program from 1980 through 1989 are presented in Figures 8 through 11. The data also indicate steady increases in the mean ITED composite score during these years.



ACT. The ACT is a battery of standardized tests used by many colleges and universities as part of the undergraduate admissions testing program. The battery of academic tests covers four cognitive areas: English, mathematics, social studies, and the natural sciences. Possible scores range from 1 to 36. During the period between 1985-86 and 1988-89 the percentage of students who completed the ACT increased from 57.9 percent to 60.5 percent (Appendix A, Table A-1). The average composite score remained fairly constant at 20.6 in 1985-86 and 20.1 in 1988-89 and remained well above the average composite scores for the nation (Figure 12).



Although data are presented for each ethnic group, it should be interpreted with caution. The number of students tested in relation to the total number of students in each ethnic group is too small to allow for generalizations to be made to all members in a given minority group. In general, most groups scored higher in the year ending in 1988 than in the year ending in 1985 (Tables 1 and 2). In the English subtest all groups but one, American Indian, either stayed the same or improved. In the subtest areas of math, social science and in composite scores, all but two groups realized gains in average scores. Blacks, Mexican Americans and Asians realized gains in all subtest areas.

Table 1
Average ACT Scores By Subtest Score
Year Ending 1985

Subtest	Ethnic Group					
	Black	Am Indian	White	Mexican Am	Asian	Hispanic
English	14.6	17.0	19.5	16.9	15.3	19.3
Math	11.3	15.5	19.8	15.7	16.7	19.2
Social Science	13.1	16.1	19.3	17.2	14.8	18.4
Natural Science	16.7	19.6	23.3	20.1	19.3	24.3
Composite	14.0	17.2	20.6	17.6	17.1	20.4
Number Tested	292	64	21741	113	197	27

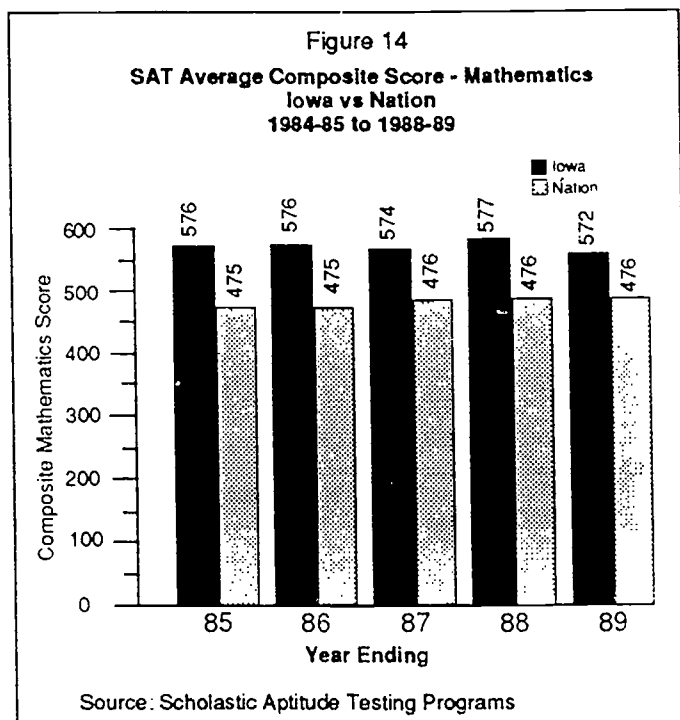
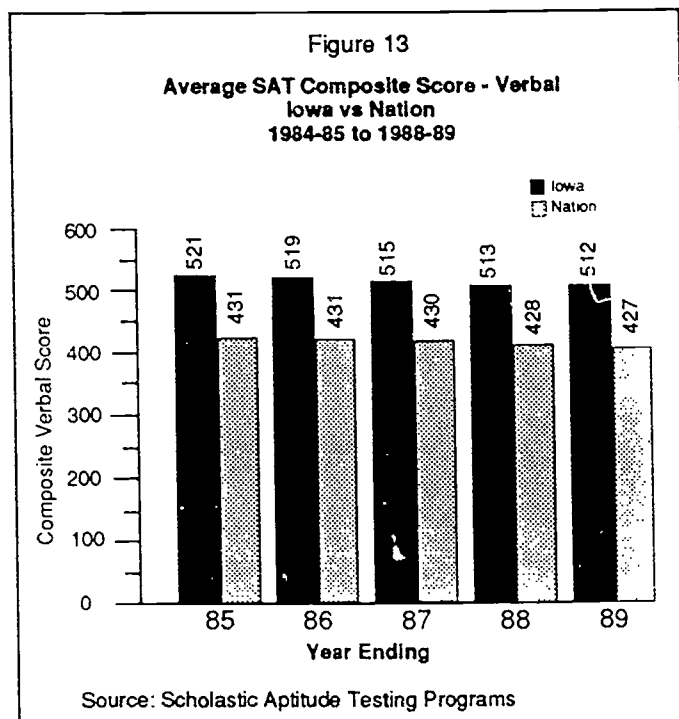
Source: American College Testing Program

Table 2
Average ACT Scores By Subtest Score
Year Ending 1988

Subtest	Ethnic Group					
	Black	Am Indian	White	Mexican Am	Asian	Hispanic
English	15.6	16.6	19.8	17.8	18.2	19.3
Math	13.1	16.2	19.4	17.1	20.1	18.5
Social Science	14.2	15.4	19.1	17.5	17.7	19.3
Natural Science	18.3	20.6	23.4	21.1	22	22.9
Composite	15.5	17.3	20.5	18.6	19.6	20.1
Number Tested	305	86	21869	130	274	35

Source: American College Testing Program

SAT. The SAT is a standardized test used for college admissions. The test is made up of a combination of items similar to those often found in both intelligence tests and high school achievement tests, and yields both verbal and mathematical scores. Each score is reported on a scale ranging from 200 to 800. Although there was insufficient data to examine trends in the percentage of students who took the SAT between 1985-86 and 1988-89, the average composite scores for both the verbal and the mathematics subtests were consistently above the national composite scores (Appendix A, Table A-2). Iowa scores in the verbal subtest and the mathematics subtest declined slightly from 1985-86 to 1988-89 (Figures 13 and 14). Average composite verbal subtest scores for the nation declined as well from 1985-86 to 1988-89, while SAT mathematics scores for the nation increased slightly.

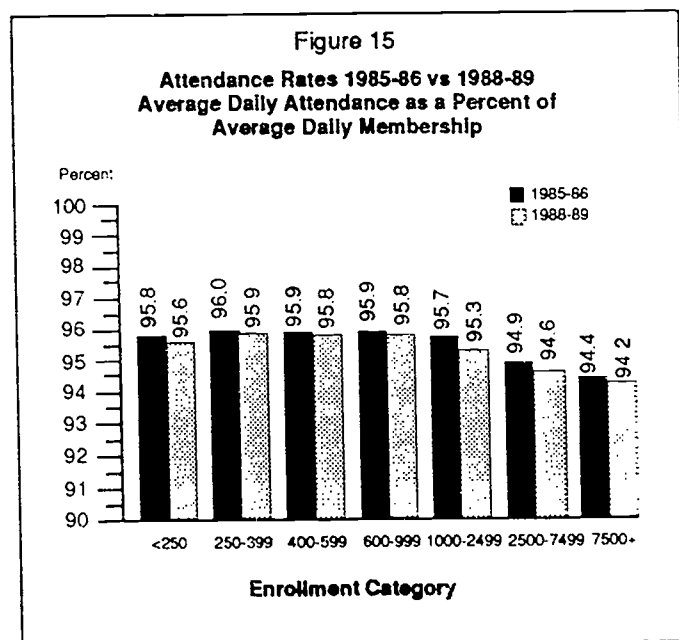


STUDENT ATTENDANCE

Attendance Rates

The average daily attendance is the average number of students in attendance relative to the number of days schools were legally in session. The average daily membership is the average number of students enrolled relative to the number of days schools were legally in session. An attendance rate is calculated by dividing the average daily attendance by the average daily membership. For purposes of this study, the attendance rate is expressed as a percentage (Appendix A, Table A-3).

State average attendance rates remained fairly constant between 1985-86 (95.3 percent) and 1988-89 (95.0 percent). Although attendance rates were slightly lower for each enrollment category in 1988-89 than in 1985-86, these differences did not reflect any meaningful decrease (Figure 15).



Dropouts

Dropouts are those students who leave school for any reason except death or transferring to another school before graduating or completing a program of studies. Dropout rates are calculated by dividing the total number of dropouts by the total number of enrollees. Rates are then converted to percentages. The state dropout rate for students in grades 7 through 12 increased from 2.29 percent in 1985-86 to 2.61 percent in 1988-89 (Tables 3 and

4). Slight increases in dropout rates occurred for each enrollment category from 1985-86 to 1988-89. Dropout rates for the seven enrollment categories ranged from .62 percent to 4.34 percent in 1985-86 and from .72 percent to 5.03 percent in 1988-89. In both

1985-86 and in 1988-89, districts with enrollments of 2,500 and more had approximately 45 percent of the 7-12 grade enrollees but accounted for about 70 percent of all dropouts.

Table 3

**Total Dropouts By Enrollment Category
1985-86**

	Grade Level							Total	% Total Dropouts	% of Enrollee	Dropout Rate
	7	8	9	10	11	12	Other*				
State	55	113	1238	1236	1314	1246	141	5343			2.29
<250	0	0	4	4	11	10	0	29	0.5	2	.62
250-399	1	3	18	27	35	32	3	119	2.2	5.8	.88
400-599	1	7	32	45	51	65	1	202	3.8	9.5	.92
600-999	2	0	62	93	118	86	3	364	6.8	14.8	1.05
1000-2499	7	27	161	197	256	214	7	869	16.3	22.8	1.63
2500-7499	21	31	287	264	291	287	38	1219	22.8	20	2.60
7500 and over	23	45	674	606	552	552	89	2541	47.6	25.1	4.34

**Other* includes secondary special education students who are not assigned to a specific grade level.

Source: Dropout File, 1985-86

Department of Education

Table 4

**Total Dropouts By Enrollment Category
1988-89**

	Grade Level							Total	% Total Dropouts	% of Enrollee	Dropout Rate
	7	8	9	10	11	12	Other*				
State	27	64	1121	1363	1561	1472	44	5652			2.61
<250	0	0	5	6	9	11	0	31	0.5	2	.72
250-399	0	2	14	43	37	34	0	130	2.3	5.8	1.03
400-599	0	4	25	52	71	61	0	213	3.8	10.1	.98
600-999	6	1	56	66	107	131	0	367	6.5	13.8	1.23
1000-2499	3	7	155	251	310	260	10	996	17.6	23.7	1.94
2500-7499	2	16	220	266	322	329	1	1156	20.5	19.2	2.78
7500 and over	16	34	646	679	705	646	33	2759	48.8	25.4	5.03

**Other* includes secondary special education students who are not assigned to a specific grade level.

Source: Dropout File, 1988-89

Department of Education

From 1985-86 to 1988-89 the percentage of student dropouts decreased in grades 7 and 8 and in the category of "other" (Table 5). Increases were evident in the remaining grades. For both years, the highest percentage of dropouts was reported in grade 11 and the lowest in grade 7.

Table 5

**Dropouts as a Percent of Students Enrolled
By Grade Level
1985-86 vs 1988-89**

Grade Level	1985-86	1988-89
7	0.16	0.08
8	0.31	0.18
9	3.00	3.23
10	3.04	4.08
11	3.45	4.47
12	3.44	4.01
Other*	2.19	0.61
Total	2.29	2.61

*"Other" includes secondary special education students who are not assigned to a specific grade level.

Source: Dropout file
Department of Education

Enrollment

- *Public school enrollment declined more than 1.5 percent between 1985-86 and 1989-90, a loss of almost 7,500 students. Nonpublic school enrollment declined more than 6 percent between 1985-86 and 1989-90, a loss of almost 3,000 students. The loss of an additional 3.8 percent of public school students and a slight gain in nonpublic school students is expected over the next five years.*
- *The majority of Iowa students attend districts with enrollments of 600 or more.*
- *Minority student population in Iowa's public schools showed double-digit increases between 1985-86 and 1989-90 in three minority groups, while the white majority student population decreased about 2 percent. Minority student population in nonpublic schools increased for Asian and Black students by about 20 percent and 40 percent respectively, while the white majority enrollment decreased 3.6 percent.*
- *Prekindergarten enrollment in public schools increased about 58 percent between 1985-86 and 1989-90.*

Student enrollment is one of the most important input components in the overall framework of educational indicators designed to describe the condition of education in Iowa. The number and characteristics of students served by Iowa's public and nonpublic schools generate the funds necessary for educational programs and services as well as dictate the type of services and programs which will best serve the varied and unique needs of the learner. Because of the relationship among students, programs, staff, expenditures, and outcomes, any significant change in student enrollment trends, composition of the student population served, or shift in enrollments has the potential to impact other components in the education process.

This chapter provides information on enrollment trends and projections, the distribution of students and districts, prekindergarten enrollments, and ethnic distributions. Data are provided for both public school districts and for nonpublic schools.

ENROLLMENT TRENDS AND PROJECTIONS

1 through 7 showed increased enrollments. Grades 3, 4, and 6 experienced an increase of 8 percent or more. The largest enrollment decreases occurred in grades 9 (11 percent), 10 (17 percent), and 11 (15 percent).

Total Enrollment

The peak year for Iowa school enrollments was 1969-70, when combined public and nonpublic enrollment reached 738,919. Since then enrollments have declined steadily until 1989-90. Projections for total state enrollment suggest the decline will continue over the next five years. Projections for public schools suggest a decline of another 3.8 percent by the 1994-95 school year (Table 1). Projected enrollments for nonpublic schools suggest a slight increase through 1992-93, followed by decreases for 1993-94 and 1994-95. The projected nonpublic enrollment for 1994-95 is expected to be slightly less than that for 1990-91.

Public School Enrollment

Since the 1985-86 school year, public school enrollments have declined more than 1.5 percent (Appendix B, Table B-1). This represents a loss of almost 7,500 students. Not all public school grades, however, experienced declines (Figure 1). Grades

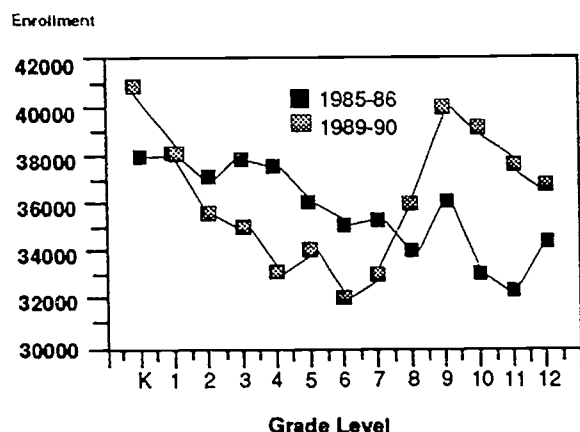
Table 1

Enrollment Projections for Public
and Nonpublic Schools
1990-91 through 1994-95

	Public	Nonpublic
1990-91	474,583	46,369
1991-92	472,202	46,573
1992-93	469,089	46,587
1993-94	464,853	46,492
1994-95	460,155	46,300

Source: K-12 Enrollment Statistics
Department of Education
Bureau of Planning, Research and Evaluation

Figure 1
Public School Enrollment
By Grade Level
1985-86 vs 1989-90

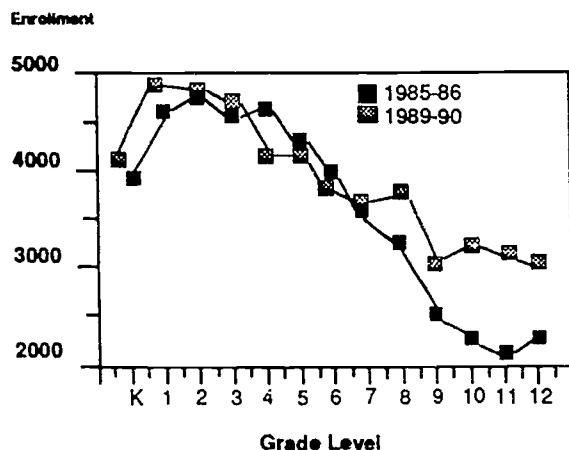


Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Nonpublic School Enrollment

In 1985-86 the nonpublic school enrollment was 9.2 percent of the total state enrollment. This decreased to 8.8 percent by 1989-90. Nonpublic school enrollments declined more than 6 percent since 1985-86, a loss of almost 3,000 students (Appendix B, Table B-2). The greatest decline occurred in grades 10, 11, and 12, with losses in excess of 20 percent (Figure 2). Grades 4, 5, and 6 experienced enrollment increases.

Figure 2
Nonpublic School Enrollment
By Grade Level
1985-86 vs 1989-90



Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

DISTRIBUTION OF PUPILS

Public School Districts

Table 2 shows the distribution of public school students across enrollment categories. During the 1985-86 school year, the eight largest school districts, representing only 1.8 percent of the total districts, accounted for 25.2 percent of all students (Figure 3). The 32 largest school districts, representing 7.3 percent of all districts, enrolled more than 44 percent of all students. On the other hand, districts with enrollments under 600, representing 54 percent of all districts, accounted for only 17.6 percent of all students. In 1989-90 Iowa's 478,486 public school students were distributed across 431 school districts. The distribution of pupils among districts remained essentially unchanged.

Table 2
Distribution of Public School Pupils
By Enrollment Category
1985-86 vs 1989-90

Enrollment Category	1985-86	Total No. of Districts	1989-90	Total No. of Districts
<250	10,124	52	10,791	56
250-399	29,060	90	28,203	85
400-599	46,544	94	49,047	98
600-999	72,595	97	66,119	88
1000-2499	109,551	72	111,966	73
2500-7499	95,189	24	93,099	23
7500 and over	122,269	8	119,261	8
Total	485,332	437	478,486	431

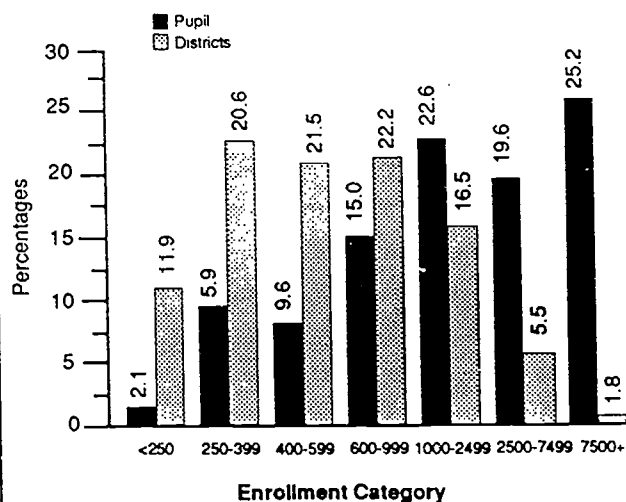
Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Nonpublic Schools

There were 230 nonpublic schools in 1985-86 and 226 in 1989-90. In 1989-90 more than 50 percent of nonpublic school students attended schools with enrollments of less than 160, while only 4 percent attended schools with enrollments of 500 or more.

Figure 3

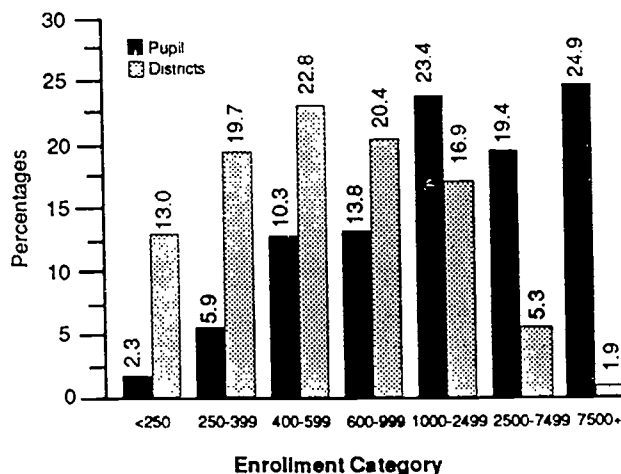
Distribution of Public School Pupils and Districts By Enrollment Category 1985-86



Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Figure 4

Distribution of Public School Pupils and Districts By Enrollment Category 1989-90



Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

ETHNIC DISTRIBUTION

Ethnic distribution in the public and nonpublic schools changed only slightly from 1985-86 to 1989-90. Table 3 indicates that the total minority enrollment in public schools increased from 22,777 (4.7 percent) in 1985-86 to 26,123 (5.4 percent) in 1989-90. The greatest increase, nearly 35 percent, occurred in the Hispanic minority group.

Table 3

Public School Enrollments by Ethnic Group 1985-86 vs 1989-90

Race	1985-86		1989-90		% Change
	N	%	N	%	
American Indian	1,090	.22	1,432	.3	31.38
Hispanic	4,069	.84	5,478	1.1	34.63
Asian	5,310	1.1	6,127	1.3	15.39
Black	12,308	2.54	13,086	2.7	6.32
White	462,555	95.3	452,363	94.6	-2.2
Total Enrollment	485,332		478,486		

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

In 1985-86 the minority enrollment in nonpublic schools accounted for 2.5 percent of the total nonpublic enrollment, with Asian and Black students accounting for the largest portion of minority enrollment (Table 4). The percentage of minority students increased slightly in 1989-90 to 2.9 percent of the total nonpublic enrollment.

Table 4

Nonpublic School Enrollments by Ethnic Group 1985-86 vs 1989-90

Race	1985-86		1989-90		% Change
	N	%	N	%	
American Indian	42	.1	30	.1	-28.60
Hispanic	527	1.1	506	1.1	-3.98
Asian	344	.7	420	.9	22.10
Black	273	.6	380	.8	39.20
White	48,372	97.5	46,623	97.1	-3.6
Total*	49,558		47,959		

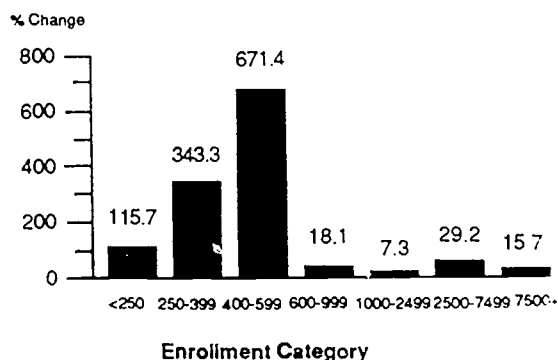
Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation
*Includes Pre-Kindergarten

PREKINDERGARTEN ENROLLMENT

Prekindergarten enrollment increased from 974 in 1985-86 to 1,536 in 1989-90. This is an increase of 57.7 percent statewide. This is an increase of approximately 11.5 percent per year. The greatest increase occurred in districts with enrollments of less than 600 (Figure 5). If the current rate of increase continues over the next five-year period there will be an estimated prekindergarten enrollment of over 2,600 by the 1994-95 school year.

Figure 5

Percent Change in Prekindergarten Enrollments
By Enrollment Category
1985-86 to 1989-90



Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

In nonpublic schools, prekindergarten enrollment totaled 532 in 1985-86 and increased to 1,926 in 1989-90. The percentage increase was considerably greater than the increase for public schools.

School Finance

- *Total federal and intermediate revenues remained relatively constant between 1985-86 and 1988-89, together accounting for approximately 3 percent of total revenue in both years. Federal revenues decreased for districts with enrollments of 600 to 999, and intermediate revenues decreased for districts with enrollments between 250 and 399 and for districts with enrollments under 250.*
- *Assessed valuation per pupil increased only about .5 percent statewide and decreased for districts under 1,000 enrollment. Decreases ranged from about 1.5 to 13.7 percent.*
- *State revenues rose from 43.9 percent to an average of 51.6 percent of all revenues. There was a range of 16 percentage points in state revenues from the largest enrollment category to the smallest enrollment category in 1988-89.*
- *The total percentage of revenue from local sources decreased from an average of about 53 percent in 1985-86 to 45.5 percent in 1988-89. The percentage of local revenues in 1985-86 in enrollment categories under 600 was reduced from the 56 to 76 percent range to a range of from 47 to 58 percent in 1988-89.*
- *The passage rate for bond issues increased from 40 percent to 62.9 percent between 1985-86 and 1988-89. The number of bond issues attempted increased from 10 to 35. Bond issues generated \$2.6 million in 1985-86 and \$63.8 million in 1988-89.*
- *An average of 76 percent of all districts employed the site levy in 1985-86, and 79 percent used the levy in 1988-89. A higher percentage of larger districts employed the site levy in both years.*
- *The playground levy was used by about 4 percent of all districts in both years.*
- *The highest percentage of use for the schoolhouse levy was by districts with enrollments under 250, districts with enrollments from 2,500 to 7,499, and districts with enrollments of 7,500 and more.*
- *Between 1985-86 and 1988-89 total operating expenditures increased 20.4 percent to almost \$1.78 billion. Per-pupil expenditures rose from \$3,032 to \$3,720. The discrepancy between the highest and lowest per-pupil expenditure average was about 16 percent in 1985-86 and increased to nearly 19 percent in 1988-89.*
- *The following changes occurred in per-pupil expenditures between 1985-86 and 1988-89:*
 - salaries increased 23.3 percent*
 - benefits increased 29.9 percent*
 - purchased services increased 18 percent*
 - supplies increased 13.3 percent*
 - capital outlay increased 15.2 percent statewide but decreased 3.4 percent for districts in the largest enrollment category*

"other" expenditures decreased 4 percent due primarily to a decrease in expenditures in districts in the two largest enrollment categories

- Operation and maintenance expenditures per pupil increased 5.9 percent statewide and accounted for 12.2 percent of total expenditures in 1985-86 and 10.6 percent in 1988-89.*
- Per-pupil administrative expenditures increased 19.2 percent. As a percent of operating expenditures, administrative expenditures decreased from 10.2 percent of total expenditures in 1985-86 to 9.9 percent in 1988-89.*
- Per-pupil expenditures for instruction increased an average of 26.6 percent over the period, and increases ranged from about 23 percent to 31 percent. In general, the smaller the enrollment category, the greater the percentage increase. As a percent of total expenditures, instructional expenditures increased from an average of 65.3 percent to 67.4 percent statewide.*

Within the context of input, process, and outcome indicators, school finance plays a dual role. School revenues are the financial resources available to schools to provide educational programming and services and are, therefore, considered an input indicator. Expenditures, however, demonstrate how the revenues were allocated to support the educational process.

School revenues are provided through federal, state, and local contributions. Federal funds are generally provided for programs such as remediation and food programs based upon needs of the districts. Some of these federal funds are provided to districts through the Department of Education, and others flow through area education agencies to local school districts.

The majority of a school district's revenue is from property taxes and state aid, the mix of which is determined by a formula. The total enrollment of a district is used to determine the amount of the budget in the formula, while the assessed valuation of property is used to determine the state aid and property taxes needed to support the budget. In addition to property taxes and state aid, a district may also have income surtaxes as a source of revenue. School districts' total budgets include the amount generated under the basic school finance formula plus any levies or miscellaneous income. Through board- or voter-approved levies, additional local and state revenues may be generated.

School districts account for the generation and expenditure of funds through two fund groups, the general fund or the schoolhouse fund. Within the general fund the majority of the revenues and expenditures are accounted for in the operating fund. The examination of school expenditures includes total operating and schoolhouse fund, across programs and objects such as salaries, benefits, and supplies. As 1989-90 revenues and expenditures were not available at the time this report was being prepared, data for 1988-89 are the most current available. Financial information for nonpublic schools is not reported to the Department of Education and is not included in this report.

SCHOOL REVENUES

Total Revenues

Total school revenues in the general fund increased 19.84 percent between 1985-86 and 1988-89 (Table 1). Increases occurred in all enrollment categories. The greatest increase occurred in districts with enrollments less than 250. Districts with enrollments between 600 and 999 received the least increase. Districts in four of seven categories experienced increases of at least 21 percent.

Table 1

Total Revenues by Enrollment Category
1985-86 and 1988-89

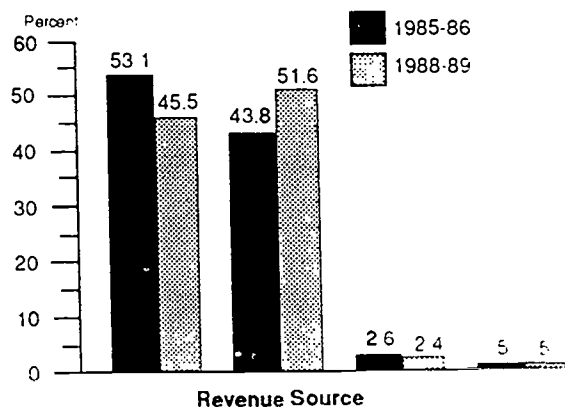
	1985-86	# Districts	1988-89	# Districts	% Change
State	\$1,471,976,378	436	\$1,764,078,121	433	19.84
<250	35,782,820	51	48,537,731	55	35.64
250-399	91,722,570	90	111,276,036	88	21.32
400-599	140,308,973	94	181,424,049	97	29.30
600-999	215,497,347	97	238,446,261	88	10.65
1000-2499	320,686,864	72	401,636,821	74	25.24
2500-7499	288,708,313	24	330,342,100	23	14.42
7500+	379,269,491	8	452,415,123	8	19.28

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Figure 1 represents the distribution of total revenues according to the funding source. While federal and intermediate contributions

Figure 1

Percent of Total Revenue by Source
1985-86 vs 1988-89



Source: Secretary's Annual Report
Department of Education

Note: Tax credits not included

remained relatively constant across the period under study, a shift occurred in the relative contributions from state and local sources. The state and local sources reflect what the district received and as such do not include the state revenue provided in the form of credits to tax payers. Thus, this does not reflect the total property tax/state aid distribution.

Federal Revenues

Although the proportion of total revenues accounted for by federal funds remained fairly constant between 1985-86 and 1988-89, the actual appropriation increased 9.6 percent (Table 2). There appears to be no pattern to increased appropriations across enrollment categories. The greatest increases occurred in districts with enrollments less than 250, between 400 and 599, between 1,000 and 2,499, and 7,500 or more. Districts with enrollments between 600 and 999 received less federal funds in 1988-89 than in 1985-86 (see Appendix C, Table C-1 for federal revenues and federal revenues as a proportion of total revenues by enrollment category).

Table 2

Federal Revenues by Enrollment Category
1985-86 and 1988-89

Category	Revenues 1985-86	Revenues 1988-89	% Change
State	\$38,069,194	\$41,722,086	9.6
<250	8,978,916	1,122,508	14.67
250-399	2,696,293	2,747,072	1.88
400-599	3,777,819	4,196,496	11.08
600-999	5,970,969	5,639,528	-5.55
1000-2499	7,821,521	8,525,657	9.00
2500-7499	5,391,292	5,594,515	3.77
7500+	11,432,384	13,896,310	21.55

Area Education Agency Contributions

Contributions from area education agencies increased 26.4 percent between 1985-86 and 1988-89 (Table 3). Increases for districts with enrollments of 400 to 599 and 1,000 to 2,499 exceeded increases in all other categories. Districts with enrollments less than 400 experienced decreases in AEA funding (see Appendix C, Table C-2 for AEA revenues and AEA revenues as a proportion of total revenues by enrollment category).

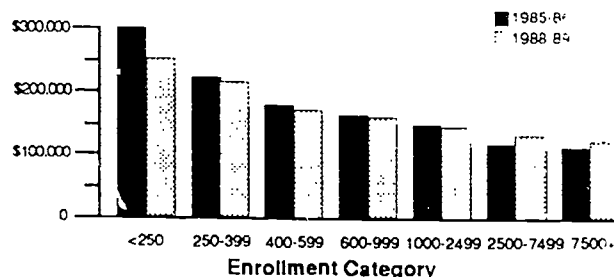
Table 3**Intermediate Revenue by Enrollment Category
1985-86 vs 1988-89**

Category	Revenues 1985-86	Revenues 1988-89	% Change
State	\$7,380,785	\$9,332,493	26.44
<250	53,549	50,743	-5.24
250-399	82,821	82,319	-0.61
400-599	266,523	448,525	68.29
600-999	623,046	741,408	19.00
1000-2499	691,294	1,252,734	81.22
2500-7499	474,493	502,362	5.87
7500+	\$5,189,059	\$6,254,402	20.53

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

State Contribution

Assessed Valuation. Assessed valuation per pupil averaged \$146,357 in 1985-86, with a range from \$112,754 to \$291,357 (Appendix C, Table C-3). High per-pupil valuations were associated with low enrollment, and low per-pupil valuations were associated with high enrollment. Average per-pupil valuations increased slightly for the state from \$146,357 in 1985-86 to \$147,104 in 1988-89, an increase of .5 percent. However, for districts with enrollments below 1,000, average assessed valuations per pupil decreased over the period from approximately 1.5 percent to 13.7 percent (Figure 2).

Figure 2**Assessed Valuation Per Certified Enrollment
By Enrollment Category
1985-86 vs 1988-89**

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

a. Assessed Valuation as of 1/84 and 1/87

State Revenues. State revenues, excluding tax credits, increased 41 percent from 1985-86 to 1988-89 (Table 4). All districts, regardless of enrollment, realized an increase of at least 27 percent. In general, smaller school districts received greater increases. The greatest increase occurred among districts with

enrollments less than 250 (see Appendix C, Table C-4 for state revenues and state revenues as a proportion of total revenues by enrollment categories.)

Table 4**State Revenues by Enrollment Category
1985-86 vs 1988-89**

Category	Revenues 1985-86	Revenues 1988-89	% Change
State	\$645,470,971	\$910,462,041	41.05
<250	7,539,710	19,050,847	152.67
250-399	27,966,954	46,520,458	66.34
400-599	53,306,381	87,901,569	64.90
600-999	87,832,596	118,755,057	35.21
1000-2499	143,453,456	210,503,402	46.74
2500-7499	140,290,700	178,259,252	27.06
7500+	\$185,081,174	\$249,471,456	34.79

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Does Not Include Tax Credits

4:

Local Contributions

Total Local Revenues. Total revenues from local sources increased 2.75 percent between 1985-86 and 1988-89 (Table 5). Districts in all enrollment categories except one experienced increases between 1.56 percent and 7.49 percent. Districts with enrollments between 600 and 999 experienced a decrease in local revenues between 1985-86 and 1988-89.

Table 5**Local Revenue* by Enrollment Category
1985-86 vs 1988-89**

	1985-86		1988-89		% Total Change in Rev
	Revenue	% of Total Rev	Revenue	% of Total Rev	
State	\$781,055,428	53.06	\$802,561,501	45.49	2.75
<250	27,210,645	76.04	28,313,633	58.33	4.05
250-399	60,976,502	66.48	61,926,187	55.65	1.56
400-599	82,958,250	59.13	88,877,459	48.99	7.14
600-999	121,070,736	56.18	113,310,268	47.52	-6.41
1000-2499	168,720,593	52.61	181,355,028	45.15	7.49
2500-7499	142,551,828	49.38	145,985,971	44.19	2.41
7500+	\$177,566,874	46.82	\$182,792,955	40.40	2.94

*Tax Credits not considered

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

In 1985-86, over 76 percent of all revenues for districts with enrollments less than 250 were local revenues. This compares to 46.82 percent among districts with enrollments greater than 7,500. The proportion of total state revenues accounted for by local revenues decreased markedly from 53.06 percent in 1985-86 to 45.49 percent in 1988-89. The greatest decrease occurred among districts with enrollments less than 250. In 1988-89, local revenues accounted for 58.33 percent of total revenues for these districts. The range of local revenue percentages decreased approximately 12 percentage points, from a range of 26.66 in 1985-86 to a range of 17.93 points in 1988-89.

Bond Issues. In 1985-86, 10 bond issues were voted on in districts across the state (see Table 6). This number increased 250 percent in 1988-89. The success rate of the bond issues also increased from 40 percent in 1985-86 to 62.9 percent in 1988-89. This resulted in an increase of the percentage of monies approved from 8.64 percent in 1985-86 to 61.82 percent in 1988-89. The average amount of the bond issues increased 344.78 percent between 1985-86 and 1988-89. (see Appendix C, Table C-5 for information regarding bond issues according to enrollment categories.)

Table 6

**Bond Issues Petitioned and Passed
1985-86 vs 1988-89**

	1985-86		1988-89	
	Issues Petitioned	Issues Passed	Issues Petitioned	Issues Passed
Number	10	4	35	22
Total Amt.	\$30,210,000	\$2,610,000	\$112,988,440	\$63,848,440
Average	\$3,021,000	\$652,500	\$2,951,098.29	\$2,902,201.82

Site Levy. Seventy-six percent of all districts used a site levy in 1985-86 (Table 7). More than 86 percent of districts with enrollments from 600 to 999 and 2,500 to 7,499 employed it, while all districts with enrollments of 7,500 and more used it.

Table 7

**Number and Percent of Districts Utilizing Site Levy
1985-86 and 1988-89**

	1985-86			1988-89		
	No. Districts	N	% Districts	No. Districts	N	% Districts
State	332	437	76.0	342	433	79.0
<250	30	52	57.7	36	55	65.5
250-399	59	90	65.6	61	88	69.3
400-599	73	94	77.7	75	97	77.3
600-999	84	97	86.6	77	88	87.5
1000-2499	57	72	79.2	65	74	87.8
2500-7499	21	24	87.5	20	23	87.0
7500 +	8	8	100.0	8	8	100.0

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

The percentage of districts that used site levies either remained the same or increased in each enrollment category by 1988-89. Districts with enrollments under 250 and from 1,000 to 2,499 increased use of the site levy by about 8 percentage points, while the percentage of use among other districts was about the same. In 1988-89, 3 percent more districts statewide used the site levy, for a total of 79 percent.

Playground Levy. Only about 4 percent of school districts employed a playground levy in both 1985-86 and 1988-89 (Table 8). The highest percentage of districts utilizing the playground levy in both years were those with enrollments from 2,500 to 7,499 and 7,500 or more.

Table 8

**Number and Percent of Districts with Playground Levy
1985-86 vs 1988-89**

	1985-86			1988-89		
	No. Districts	N	% Districts	No. Districts	N	% Districts
State	17	437	3.9	18	433	4.2
<250	3	52	5.8	5	55	9.1
250-399	2	90	2.2	0	88	0.0
400-599	4	94	4.3	4	97	4.1
600-999	1	97	1.0	2	88	2.3
1000-2499	2	72	2.8	2	74	2.7
2500-7499	4	24	16.7	4	23	17.4
7500 +	1	8	25.0	1	8	12.5

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Schoolhouse Levy. In 1985-86, 55.4 percent of all districts employed the schoolhouse levy (Table 9). Less than half of the districts with enrollments from 400 to 999 used the levy. Districts with enrollments from 2,500 to 7,499 ranked highest in percentage of use, followed closely by districts with enrollments under 250.

Table 9

**Number and Percent of Districts with Schoolhouse Levy
1985-86 vs 1988-89**

	1985-86			1988-89		
	No. Districts	N	% Districts	No. Districts	N	% Districts
State	242	437	55.4	238	433	55.0
<250	42	52	80.8	39	55	70.9
250-399	55	90	61.1	51	88	58.0
400-599	42	94	44.7	40	97	41.2
600-999	38	97	39.2	42	88	47.7
1000-2499	39	72	54.2	41	74	55.4
2500-7499	20	24	83.3	19	23	82.6
7500 +	6	8	75	6	8	75.0

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Slightly fewer districts employed the levy in 1988-89 than in 1985-86. Districts with enrollments from 250 to 399 decreased use of the levy, and districts with enrollments from 600 to 999 increased its use. Use by districts in other enrollment categories remained relatively stable.

SCHOOL EXPENDITURES

Total Expenditures

Total operating expenditures for public school districts for the 1985-86 school year were just under \$1.5 billion. In 1988-89 expenditures grew to almost \$1.78 billion, an increase of 20.4 percent.

Per-Pupil Expenditures

Table 10 illustrates total operating fund expenditures without fund modifications (i.e., transfers between funds, AEA flow-through funds, and refunds of a prior year's revenue) depicted as a per-pupil expenditure based on certified enrollment counts. In 1985-86 the state average per-pupil expenditure was \$3,032. The average expenditure of districts in the seven enrollment categories ranged from \$3,489 in districts with enrollments under 250, to \$2,935 in districts with enrollments from 1,000 to 2,499. The average per-pupil expenditure for districts in the lowest spending group amounted to about 84 percent of the average expenditures of high spending districts.

In 1988-89, per-pupil expenditures for the state averaged \$3,720, an increase of 22.7 percent over 1985-86. The range in average per-pupil expenditures in 1988-89 was from \$4,442, in districts with less than 250 enrollment, to \$3,604 in districts with enrollments from 1,000 to 2,499 and in districts with enrollments from 2,500 to 7,499.

Table 10

Average Operating Fund Expenditures
Per Certified Enrollment
1985-86 vs 1988-89

	1985-86	1988-89	% Change
State	\$3,032	\$3,720	22.7%
<250	3,489	4,442	27.3
250-399	3,105	3,935	26.7
400-599	3,021	3,777	25.0
600-999	2,975	3,671	23.4
1000-2499	2,935	3,604	22.8
2500-7499	3,005	3,604	19.9
7500 +	\$3,122	\$3,804	21.8

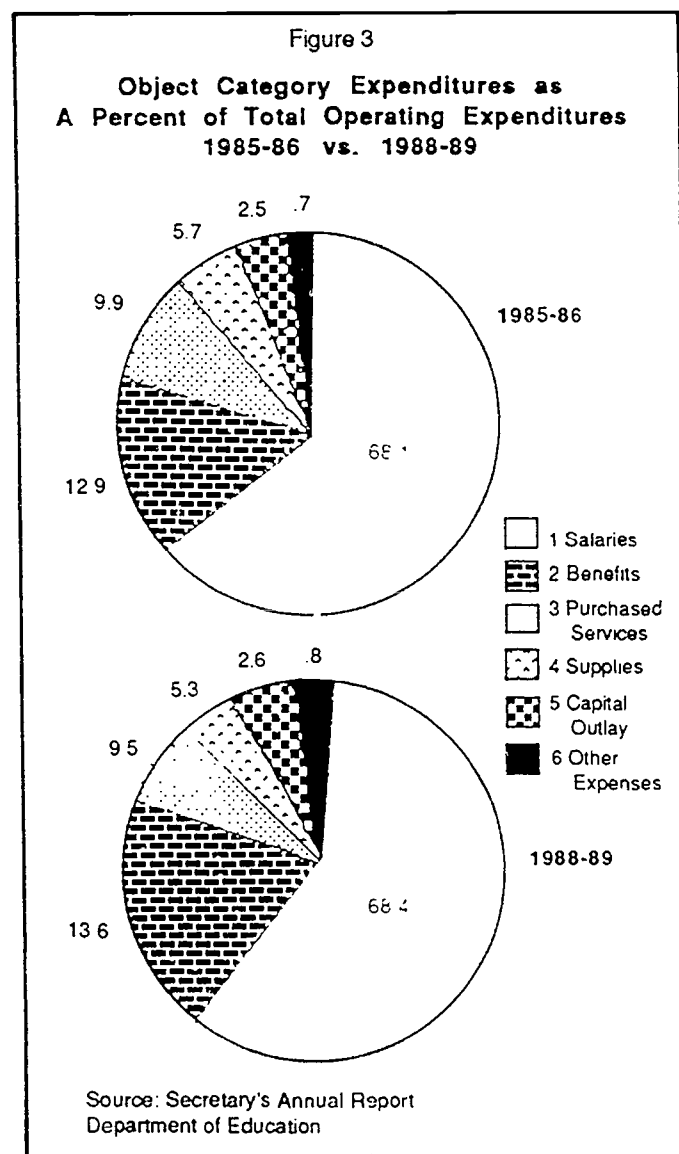
Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

The average per-pupil expenditure for the lowest spending districts amounted to 81.1 percent of the average expenditure of districts with the highest expenditure. This is a decrease in the spread between the highest and lowest average per-pupil expenditures of about 3 percentage points from 1985-86. In both years, per-pupil expenditures decreased as school district enrollments increased through the category of enrollments from 1,000 to 2,499. Per-pupil expenditures tended to increase in districts with enrollments greater than 2,499.

The average percentage increase in per-pupil expenditures across the seven enrollment categories ranged from 19.9 percent for districts with enrollments from 2,500 to 7,499 to 27.3 percent for districts with enrollments less than 250.

Object Category Expenditures

Total Object Category Expenditures. Figure 3 illustrates a breakdown of object category expenditures for 1985-86 and 1988-89.



Salaries. In 1985-86 salaries statewide averaged 68.1 percent of the total operating fund expenditures (Appendix C, Table C-6). Across the seven enrollment categories, salaries ranged from 65.1 percent of total operating expenditures in districts with enrollments less than 250 and from 600 to 999, to 70.3 percent of total operating expenditures in those with enrollments of 7,500 or more.

By 1988-89 salaries averaged 68.4 percent of total operating fund expenditures statewide, an increase of .3 percentage points from 1985-86 (Appendix C, Table C-7). Salary expenditures as a percentage of total operating expenditures in 1988-89 ranged from 62.5 percent in districts with enrollments less than 250 to 70.6 percent in districts with enrollments of 7,500 or more. The range in percentages allocated to salaries increased from 5.4 percentage points in 1985-86 to 8.1 points in 1988-89.

Salary expenditures across school districts increased by 23.3 percent in terms of per-pupil expenditures, with the greatest percentage increase in the enrollment category of 250 to 399 (Appendix C, Table C-8). The smallest percentage increase occurred in districts with enrollments between 2,500 and 7,499.

Benefits. The amount of total operating fund expenditures allocated for benefits in 1985-86 averaged 12.9 percent across the state (Appendix C, Table C-6). The range was restricted across enrollment categories, with an average of 11.4 percent in districts with enrollments less than 250 and an average of 14.2 percent in those of 7,500 or more.

In 1988-89 the average benefits statewide accounted for 13.6 percent of total operating funds (Appendix C, Table C-7). The averages for the seven enrollment categories ranged from 11.9 percent in the smallest districts to 15.3 in districts with enrollments of 7,500 or more. In both the base year and the current year, the percentage of operating fund allocated to benefits generally increased in each successively larger enrollment category. Per-pupil expenditures for benefits increased an average of 29.9 percent from 1985-86 to 1988-89 (Appendix C, Table C-8). Increases ranged from about 29 percent to approximately 34 percent.

Purchased Services. Purchased services accounted for 9.9 percent of the total operating fund expenditures in 1985-86 and 9.5 percent in 1988-89 (Appendix C, Tables C-6 and C-7). Per-pupil expenditures for purchased services were \$300 statewide in 1985-86 and ranged from \$266 in districts with enrollments of 2,500 to 7,499 to \$392 for districts with enrollments less than 250 (Appendix C, Table C-9). In 1988-89 the state average expenditure for purchased services increased 18 percent to \$354 per pupil (Appendix C, Table C-10). Expenditures varied in 1988-89 from \$631 per-pupil in the smallest districts to \$301 per-pupil in districts with enrollments from 2,500 to 7,499. Per-pupil expenditures for purchased services increased by more than three times the state average for districts in the enrollment category of less than 250 students, largely due to whole-grade sharing expenses.

Supplies. The percentage of total operating funds allocated for supplies decreased from 5.7 percent in 1985-86 to 5.3 percent in 1988-89 (Appendix C, Tables C-6 and C-7). In both years there was approximately a 2:1 ratio in the percentage allocated to these expenditures across the seven enrollment categories. Per-pupil expenditures for supplies increased 13.3 percent statewide, averaging \$173 in 1985-86 and \$196 in 1988-89 (Appendix C, Tables C-9 and C-10). Per-pupil expenditures in both 1985-86 and in 1988-89 varied widely, with smaller districts generally spending more per pupil.

Capital Outlay. Per-pupil expenditures for capital outlay averaged \$79 in 1985-86 and increased to \$91 in 1988-89 (Appendix C, Tables C-9 and C-10). In both years larger districts generally had lower average per-pupil expenditures than smaller districts. Overall, per-pupil expenditures for capital outlay increased by 15.2 percent from 1985-86 to 1988-89. Capital outlay expenditures in districts with less than 250 students increased almost three times the state increase, while capital outlay per-pupil decreased by 3.4 percent for districts with enrollments of 7,500 and more. Capital outlay accounted for only 2.6 percent of total operating expenditures statewide in 1985-86 and 2.5 percent in 1988-89 (Appendix C, Tables C-6 and C-7).

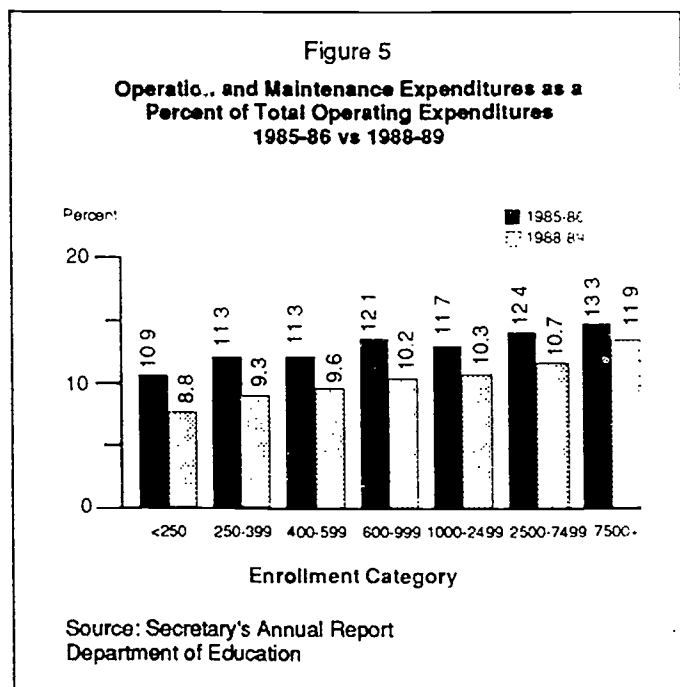
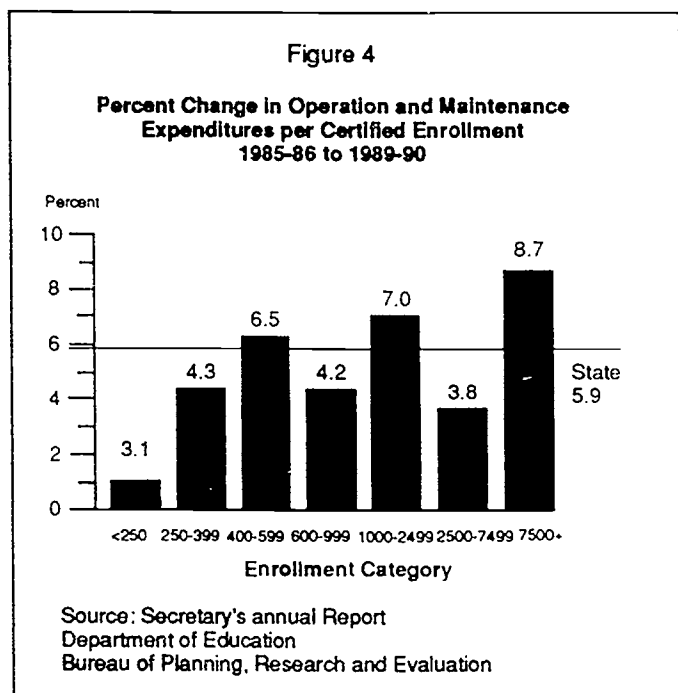
Other Expenses. "Other expenses" include expenditures for redemption of principal, interest, taxes, insurance, expenses in lieu of insurance, judgments against local school districts, and miscellaneous expenditures. On a per-pupil basis, other expenses averaged \$25 for the state in 1985-86 and \$24 in 1988-89 (Appendix C, Tables C-9 and C-10). Statewide, other expenses accounted for only .8 percent of the total operating expenditures in 1985-86 and .7 percent in 1988-89 (Appendix C, Tables C-6 and C-7).

Operation and Maintenance Expenditures

Per-pupil operation and maintenance expenditures varied across district enrollment categories from \$340 to \$415 in 1985-86, with a state average of \$371 (Appendix C, Table C-11). The lowest per-pupil expenditure was associated with districts with enrollments from 400 to 599, and the highest was reported for districts with enrollments of 7,500 or more.

From 1985-86 to 1988-89 per-pupil expenditures for operation and maintenance increased by 5.9 percent statewide to an average of \$393 (Figure 4). Expenditures in 1988-89 ranged from \$362 in districts with enrollments between 400 and 599 to \$451 in districts with enrollments of 7,500 or more. Percent increases in per-pupil expenditures exceeded the state average increase in the largest districts, in districts with enrollments from 400 to 599, and in districts with enrollments from 1,000 to 2,499.

Operation and maintenance expenditures as a percent of total operating funds decreased across all enrollment categories from 1985-86 to 1988-89 (Figure 5). On a statewide basis, the average expenditure for operation and maintenance as a percent of total operating expenditures decreased from 12.2 percent in 1985-86 to 10.6 percent in 1988-89 (Appendix C, Table C-12).

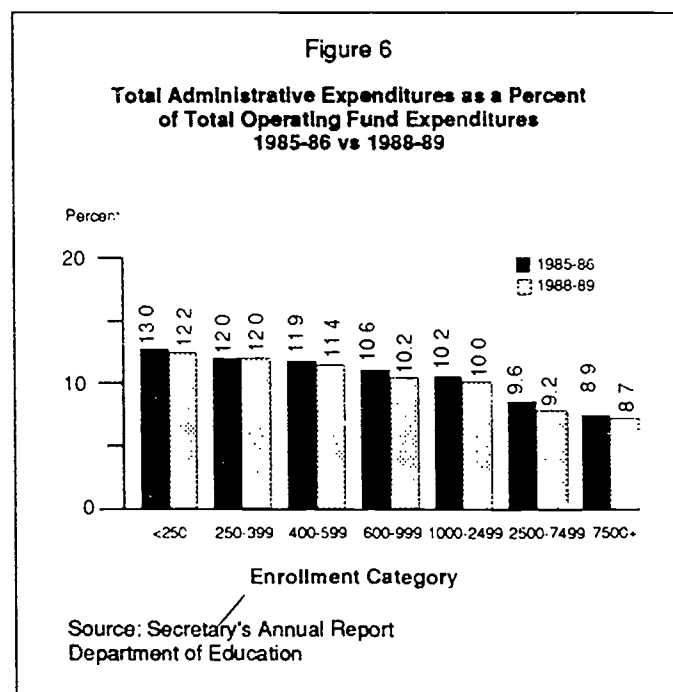


Administrative Expenditures

Administrative expenditures per-pupil ranged across district enrollment categories from an average of \$278 to an average of \$454 in 1985-86, with a state average of \$308 (Appendix C, Table C-13). Per-pupil expenditures decreased with each successively larger enrollment category. In 1988-89 average per-pupil expenditures ranged across district enrollment categories from \$331 to \$542. The state average per-pupil expenditure was \$367.

The state per-pupil expenditure for administration increased 19.2 percent. Districts with enrollments from 250 to 399 had the greatest percentage increase, 27.4 percent.

As a percent of total operating fund expenditures, the range of administrative expenditures in 1985-86 was 8.9 percent to 13 percent, with a state average of 10.2 percent (Figure 6). Districts with enrollments of less than 250 had the highest percentage of operating fund expenditures for administration, and districts with enrollments of 7,500 or more had the lowest. In 1988-89 the average expenditure for administration was 9.9 percent (see Appendix C, Table C-14 for additional information regarding administrative expenditures).



Instructional Expenditures

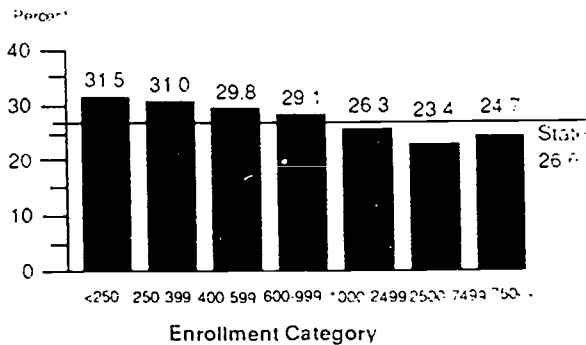
Per-pupil instructional expenditures varied across district enrollment categories from \$1,902 to \$2,246 in 1985-86 (Appendix C, Table C-15). Districts with enrollments less than 250 had the greatest expenditures, and districts with enrollments from 600 to 999 maintained the lowest. The state average was \$1,981 in 1985-86.

In 1988-89, per-pupil instructional expenditures ranged from \$2,432 in districts with enrollments between 1,000 and 2,499, to \$2,954 in those with enrollments less than 250. The state average increased from \$1,981 in 1985-86 to \$2,508 in 1988-89, an increase of 26.6 percent (Figure 7). The greatest increase was in districts with enrollments less than 250 (31.5 percent). Percentage increases appeared to be inversely associated with size of enrollment.

The percentage of total operating funds allocated for instructional expenditures in 1985-86 ranged from 63.8 percent in districts with enrollments between 250 and 399, to 66.5 percent in those with enrollments between 2,500 and 7,499 (Figure 7). State averages in the comparison years were 65.3 percent and 67.4 percent for 1985-86 and 1988-89, respectively. The lowest percentage in 1988-89 was 66 percent, found among districts with enrollments between 250 and 399 (Appendix C, Table C-16). The highest proportion of expenditures for instruction in 1988-89, 68.4 percent, occurred among districts with enrollments between 2,500 and 7,499.

Figure 7

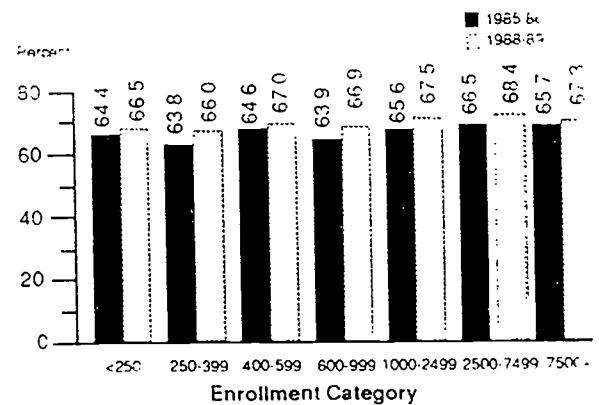
**Percent Change in Instructional Expenditures
Per Certified Enrollment
1985-86 to 1988-89**



Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Figure 8

**Instructional Expenditures as a Percent of
Total Operating Expenditures
1985-86 vs 1988-89**



Source: Secretary's Annual Report
Department of Education

Staff

- *The average age for public school teachers was between 40 and 41 years in both 1985-86 and 1989-90.*
- *Approximately two-thirds of the teacher population in public schools is female, and over 75 percent of nonpublic teachers are female. Females constitute approximately one-half of nonpublic school principals and less than one-fifth of all public school principals. The percentage of females among public school superintendents was 1.6 in 1985-86 and 2.3 in 1989-90.*
- *The minority representation among teachers and superintendents remained generally unchanged and increased slightly among principals between 1985-86 and 1989-90.*
- *In both 1985-86 and in 1989-90 about 70 percent of all public school teachers possessed undergraduate degrees, while almost 30 percent had graduate degrees. The distribution of advanced degrees for public school teachers varied widely across enrollment categories in both 1985-86 and in 1989-90, ranging from about 9 percent to 9.5 percent in enrollment categories under 250 to about 44 percent to 45 percent in the largest enrollment categories. In 1985-86 about 16 percent of nonpublic school teachers held advanced degrees, while about 13.6 percent held advanced degrees in 1989-90.*
- *Total teacher experience in public schools is relatively high and has grown from an average of 14.3 years to 15.1 years. Public school total experience appears to be linked to district enrollment, with higher levels of total experience found in larger districts. Average experience for nonpublic teachers was 11 years in 1985-86 and in 1989-90.*
- *Average tenure in public school districts has increased from 10.6 years to 11.5 years between 1985-86 and 1989-90. Public school teachers from smaller districts tend to have less longevity in a given district than teachers from larger enrollment districts. Average tenure for teachers in nonpublic schools was 5.7 years in 1985-86 and 6.3 years in 1989-90.*
- *Average contract days in public and nonpublic schools remained generally unchanged, with very limited range among enrollment categories.*
- *Average salaries for public school teachers have increased 23.3 percent to \$26,747 in 1989-90 from \$21,690 in 1985-86. The range in average salaries for public school teachers increased from \$7,694 in 1985-86 to \$7,779 in 1989-90. Salary discrepancy between teachers in the smaller districts and those in the larger districts decreased. In 1985-86 teachers in the smallest districts on the average earned only 68 percent of the salaries of their counterparts in the largest districts. In 1989-90 teachers in the smallest districts earned about 73 percent of the salaries of those in the largest districts. Percentage increases in salaries were substantially higher in smaller districts. Average salaries for 1989-90 do not include Phase III funds. Including these funds raises the average teacher salary to an estimated \$27,947.*
- *The variation in pupil-teacher ratios in the public schools appeared to be directly linked to enrollment category, with higher ratios for larger enrollment categories and lower ratios for smaller*

ones. Public school pupil-teacher ratios generally declined across all grades levels and for combinations of grades from 1985-86 to 1989-90, with average K-12 ratios declining from 16.6:1 to 16.3:1. Nonpublic pupil-teacher ratios also generally declined across all grade levels.

- The number of public school instructional aides increased 23.2 percent rising from 2,668.6 in 1985-86 to 3,287.8 in 1989-90. Public school pupil-aide ratios decreased from 182:1 to 145:1. Both the total number of instructional aides and the pupil-aide ratio varied widely across enrollment categories, with higher numbers and lower ratios being associated with larger enrollment categories. The greatest percentage of change in the number of aides occurred in districts under 250 enrollment, while the lowest percentage increase occurred for those in the largest enrollment category.

Over 42,000 full- and part-time staff provided either direct or indirect instructional support in Iowa's public and nonpublic schools and AEAs in 1989-90 (Appendix D, Tables D-1 through D-6). Although all positions contribute to the educational process, this report profiles only teachers, principals, and superintendents.

Staff characteristics can be considered as inputs in the educational setting. Staff members in a given school district enter the district with a set of inherent characteristics, such as educational background, experience, and degree level. Although many personal characteristics are fixed at the time of staff entry into the district, others change through experiences such as staff development and curriculum development programs, the pursuit of advanced degree programs, and acquisition of additional college credits.

The following characteristics are described for public and nonpublic teachers and principals: age, distribution of males and females, distribution of minorities and nonminorities, formal education, professional experience, district experience, length of contract, and salaries. Descriptions of superintendents are also included; however, because nonpublic schools are typically not administered by "superintendents," information is included only for public schools. Appendix D contains tables that profile teachers, principals, and superintendents according to these characteristics within the same table. The following examines characteristics of each of these positions independently. Two other factors that influence the education process are also reviewed, pupil-teacher ratios and instructional aides.

TEACHERS

Age

Table 1 shows that the average age for both public and nonpublic school teachers increased between 1985-86 and 1989-90 (see Appendix D, Tables D-7 through D-9 for additional information).

Table 1		
Average Age of Public and Nonpublic School Teachers		
Year	Public	Nonpublic
1985-86	40.0	36.6
1989-90	41.1	37.4

Table 2 indicates that the average age of public school teachers generally increased with the size of district enrollments.

Table 2		
Average Age of Fulltime Public School Teachers By District Enrollment Category 1985-86 and 1989-90		
Category	1985-86	1989-90
<250	36.5	37.7
250-399	37.7	39.0
400-599	38.3	39.6
600-999	39.1	40.2
1000-2499	40.0	41.0
2500-7499	40.9	42.1
7500 and more	41.7	42.8
State	40.0	41.1

Distribution of Males and Females

Table 3 illustrates the distribution of males and females among teachers in 1985-86 and 1989-90 (Appendix D, Tables D-1 through D-5 for additional information regarding the distribution of males and females). More than half of the teacher population in both public and nonpublic schools was female in both years. The percent of female teachers increased approximately 2 percentage points between 1985-86 and 1989-90 for both public and nonpublic schools.

Table 3
Distribution of Males and Females Among Teachers
In Public and Nonpublic Schools
1985-86 and 1989-90

	Public		Nonpublic	
	% Female	% Male	% Female	% Male
1985-86	62.8	37.2	77.5	22.5
1989-90	65.0	35.0	79.0	21.0

Source: Basic Educational Data Survey
Department of Education

Ethnic Distribution

Table 4 shows the distribution of minorities and nonminorities among public and nonpublic school teachers (see Appendix D, Tables D-1 through D-5 for additional information regarding the ethnic distribution of teachers). The minority representation among teachers remained relatively constant between 1985-86 and 1989-90 for both public and nonpublic schools.

Table 4
Distribution of Minorities and Nonminorities
Among Public and Nonpublic School Teachers
1985-86 and 1989-90

	Public		Nonpublic	
	Min	Nonmin	Min	Nonmin
1985-86	1.16	98.84	.52	99.48
1989-90	1.30	98.70	.50	99.50

Source: Basic Educational Data Survey
Department of Education

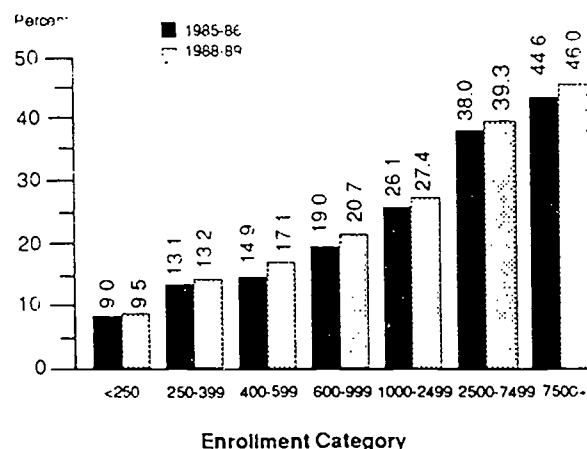
Formal Education

Approximately 70 percent of all public school teachers held baccalaureate degrees in 1985-86 and 1989-90 (Appendix D, Table 10). The percentage of public school teachers possessing degrees beyond the baccalaureate increased slightly from 1985-86 to 1989-90. In 1985-86, 28.9 percent of all full-time public

school teachers held degrees beyond the baccalaureate. This increased to 30.2 percent in 1989-90. In 1985-86, 83.2 percent of the nonpublic school teachers held baccalaureate degrees, and 16 percent held advanced degrees (Appendix D, Table D-11). Less than 1 percent of the teachers reported not having a degree. In 1989-90 comparable figures were reported for nonpublic school teachers (Appendix D, Table D-12).

Degree type seems to correspond closely with school district enrollment (Figure 1). Schools in larger enrollment categories tended to have a greater percentage of teachers with advanced degrees. The percentage of teachers with advanced degrees in 1989-90 increased slightly over 1985-86 in all but one enrollment category. Percentages remained constant in districts with enrollments between 250 and 399.

Figure 1
Percent of Fulltime Public School Teachers
With Advanced Degrees By Enrollment Category
1985-86 vs 1988-89



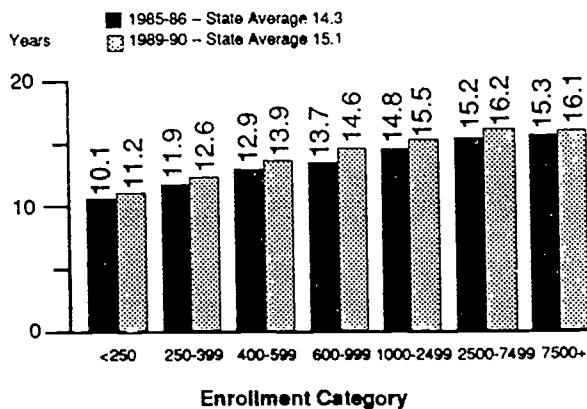
Source: Basic Educational Data Survey
Department of Education

Professional Experience in Education

The average total experience for full-time public school teachers in 1985-86 was 14.3 years. This figure grew to 15.1 years in 1989-90. Variation in total experience in both 1985-86 and in 1989-90 appeared to be associated with district enrollment. Teachers in larger districts tended to have more experience in education than teachers from smaller districts (Figure 2). Approximately five years experience separated the highest from the lowest averages in both years.

Figure 2

Average Total Experience of Fulltime Public School Teachers by Enrollment Category 1985-86 vs 1989-90



Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

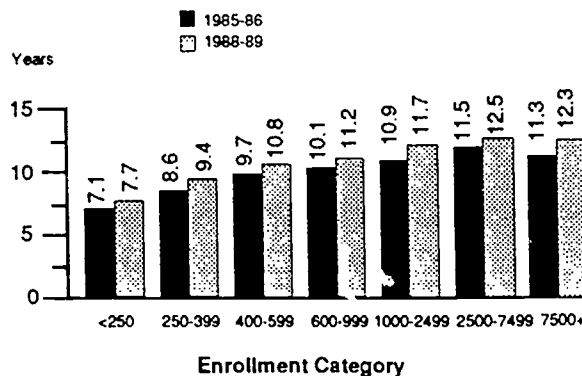
The total average experience for nonpublic school teachers was 11 years in both 1985-86 and 1989-90 (Appendix D, Tables D-8 and D-9).

District Experience

The average district experience for full-time public school teachers increased from 10.6 years in 1985-86 to 11.5 years in 1989-90 (Appendix D, Table D-13). Teachers in smaller districts tended to have less longevity on the average those in larger districts (Figure 3).

Figure 3

Average District Experience For Fulltime Public School Teachers 1985-86 vs 1989-90



Source: Basic Educational Data Survey
Department of Education

The average district experience for nonpublic school teachers was 5.7 years in 1985-86 and 6.3 years in 1989-90 (Appendix D, Tables D-8 and D-9).

Length of Contract

Average contract days for teachers remained constant at 191 days between 1985-86 and 1989-90. The average contract days for full-time public school teachers ranged from 190.4 to 191.3, a range of 1.9 days, across enrollment categories in 1985-86 (Appendix D, Table D-14).

The average number of contract days for nonpublic teachers was 190 in 1985-86 (Appendix D, Table D-8) and 191 in 1989-90. (Appendix D, Table D-9).

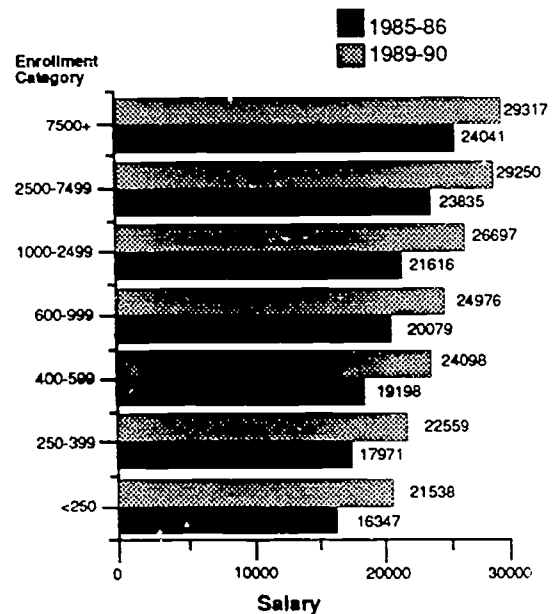
Salaries

Salaries for full-time public school teachers averaged \$21,690 in 1985-86 and \$26,747 in 1989-90 (Appendix D, Table D-15), an increase of 23.3 percent. The range in average salaries across district enrollment categories was \$7,694 in 1985-86 and \$7,779 in 1989-90. The average salaries for 1989-90 do not include Education Excellence Program Phase III funds. The average Phase III award was approximately \$1,200 per teacher. Including this figure would raise the average teacher's salary for 1989-90 to an estimated \$27,947.

Average salaries were directly related to district size in both 1985-86 and 1989-90 (Figure 4). In 1985-86, the average salary for teachers in districts with enrollments under 250 was only 68

Figure 4

Average Salaries of Fulltime Public School Teachers by Enrollment Category 1985-86 vs 1989-90*



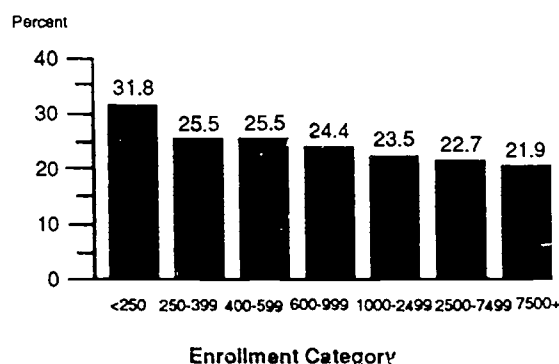
*Does not include Phase III funds
Source: Basic Educational Data Survey
Department of Education

percent of the average salary of their counterparts in districts with enrollments of 7,500 or more. In 1989-90 teachers from the smallest districts earned about 73 percent of the salary earned by teachers in the largest.

Increases in public school teacher salaries ranged from about 22 percent to 26 percent across enrollment categories for all but the smallest districts. The greatest increase in salaries, 31.8 percent, occurred in districts with enrollments less than 250 (Figure 5). The minimum \$18,000 salary enacted by the Education Excellence Act was implemented in 1987-88. Because smaller districts tended to maintain substantially lower average salaries before implementation of this provision, the disproportionately higher increase in average salaries in 1989-90 was expected.

Figure 5

Percent Change in Fulltime Public School Teacher Salaries from 1985-86 to 1989-90 By Enrollment Category



Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Salaries for nonpublic teachers averaged \$13,449 in 1985-86 (Appendix D, Tables D-8) and increased to \$16,352 in 1989-90. (Appendix D, Tables D-9), an increase of 21.6 percent over the period.

PRINCIPALS

Age

The average age of public and nonpublic school principals is reported in Table 5. The averages between public and nonpublic school principals are similar and relatively constant across time.

Table 5

Average Age of Public and Nonpublic School Principals 1985-86 and 1989-90

Year	Public	Nonpublic
1985-86	46.6	46.0
1989-90	46.7	46.8

Source: Basic Educational Data Survey
Department of Education

Table 6 indicates that the average age of public school principals, like public school teachers, tends to increase with the size of the district.

Table 6

Average Age of Public School Principals by District Enrollment Category 1985-86 and 1989-90

Category	1985-86	1989-90
State	46.6	46.7
<250	41.9	43.1
250-399	43.1	44.0
400-599	44.2	44.6
600-999	46.3	46.0
1000-2499	47.8	47.7
2500-7499	47.5	48.2
7500 +	48.7	48.4

Distribution of Males and Females

Table 7 illustrates the distribution of males and females among public and nonpublic school principals. The proportion of females decreased more than 5 percent in public schools and approximately 3 percent in nonpublic schools between 1985-86 and 1989-90. Females constituted approximately one-half of nonpublic school principals and less than one-fifth of public school principals (see Appendix D, Tables D-1 through D-5 for additional information regarding the distribution of males and females).

Table 7

Distribution of Males and Females Among Principals In Public and Nonpublic Schools 1985-86 and 1989-90

	Public		Nonpublic	
	% Female	% Male	% Female	% Male
1985-86	18.7	91.3	49.5	50.5
1989-90	13.6	86.4	46.9	53.1

Source: Basic Educational Data Survey
Department of Education

Ethnic Distribution

Minority representation among public and nonpublic school principals increased slightly between 1985-86 and 1989-90 (Table 8). However, minorities constituted less than 3 percent of public school and less than 1 percent of nonpublic school principals (Appendix D, Tables D-1 through D-5 for additional information regarding the ethnic distribution of staff).

Table 8

Distribution of Minorities and Nonminorities
Among Public and Nonpublic School Principals
1985-86 and 1989-90

	Public		Nonpublic	
	Min.	Nonmin.	Min.	Nonmin.
1985-86	1.63	98.37	0.0	100.0
1989-90	2.60	97.40	.6	99.40

Source: Basic Educational Data Survey
Department of Education

Formal Education

Approximately 87 percent of public school principals held at least master's degrees (Appendix D, Table D-16). In 1985-86, 12.9 percent held specialist or doctorate degrees. This decreased to 12.4 percent in 1989-90. Over 90 percent of nonpublic school principals held master's degrees in both 1985-86 and 1989-90 (Appendix D, Tables D-11 and D-12). While 2.2 percent held specialist or doctorate degrees in 1985-86, 1.2 percent held specialist degrees and no one held a doctorate in 1989-90. The percentage of nonpublic school principals with baccalaureate degrees increased from 2.3 percent in 1985-86 to 5 percent in 1989-90.

Professional Experience in Education

Total experience for public school principals was approximately 22 years in both 1985-86 and 1989-90 (Appendix D, Tables D-17 and D-18). This average tended to increase with district size. Nonpublic principals had an average total experience of about 21.5 years in both years (Appendix D, Tables D-8 and D-9).

District Experience

District experience for public school principals averaged just over 13 years in 1985-86 and just under 13 years in 1989-90 (Appendix D, Tables D-17 and D-18). Like total experience, tenure within a district tended to increase with district size. Tenure of nonpublic school principals averaged 6 years in 1985-86 and 5.5 years in 1989-90 (Appendix D, Tables D-8 and D-9).

Length of Contract

The average number of contract days for public school principals increased from 223 days in 1985-86 to 225 days in 1989-90. Districts in five of the seven categories increased the length of the contract between 1985-86 and 1989-90. The greatest increase, 2.87 percent, occurred for districts with enrollments less than 250. Average contract days tended to increase

with the size of the district; however, this relationship was less direct in 1989-90 than in 1985-86 (Appendix D, Tables D-17 and D-18).

Contracts for nonpublic school principals averaged 211 days in 1985-86 and 215 days in 1989-90 (Appendix D, Tables D-8 and D-9).

Salaries

Salaries for full-time public school principals increased 20.2 percent between 1985-86 and 1989-90, rising from \$35,313 to \$42,462 (Appendix D, Tables D-17 and D-18). Average salaries of principals in all district size categories increased during this period. Increases ranged from approximately 19 percent to 22 percent. Average salaries were directly related to the size of the district in both 1985-86 and 1989-90. In 1985-86 average salaries of principals in districts with enrollments less than 250 were 66.7 percent of the average salaries of principals from districts with enrollments of 7,500 or more. In 1989-90 this proportion increased slightly to 67.6 percent.

Salaries for nonpublic school principals averaged \$14,100 in 1985-86 and increased 39.9 percent to \$19,732 in 1989-90 (Appendix D, Tables D-8 and D-9).

SUPERINTENDENTS

Age

The average age of public school superintendents was approximately 49 years in both 1985-86 and 1989-90 (Appendix D, Tables D-19 and D-20). Average age within all district enrollment categories tended to increase slightly between 1985-86 and 1989-90.

Distribution of Males and Females

The percentage of females among superintendents increased from 1.6 to 2.3 between 1985-86 and 1989-90 (Appendix D, Tables D-1 and D-2).

Ethnic Distribution

One hundred percent of public school superintendents in both 1985-86 and 1989-90 were nonminority (Appendix D, Tables D-1 and D-2).

Formal Education

All but one superintendent in the public schools held an advanced degree in 1985-86 and in 1989-90. Percentages of superintendents with master's degrees and specialist's degrees increased from 1985-86 to 1989-90 (Appendix D, Table D-21).

Professional Experience in Education

Average total experience for public school superintendents remained fairly constant between 1985-86 and 1989-90 (Appendix D, Tables D-19 and D-20). The state average was just under 24 years.

District Experience

Appendix D, Tables D-19 and D-20 indicate that the average district experience for public school superintendents also remained fairly constant at 8.8 years in 1985-86 and 8.2 years in 1989-90.

Length of Contract

Tables D-19 and D-20 demonstrate that the average number of contract days for public school superintendents increased slightly from 248 days in 1985-86 to 251 days in 1989-90.

Salaries

Average salaries of full-time public school superintendents increased 24.8 percent from \$40,710 in 1985-86 to \$50,809 in 1989-90 (Appendix D, Tables D-19 and D-20). Salaries varied widely across enrollment categories in both years, with differences of \$28,638 in 1985-86 and \$32,305 in 1989-90.

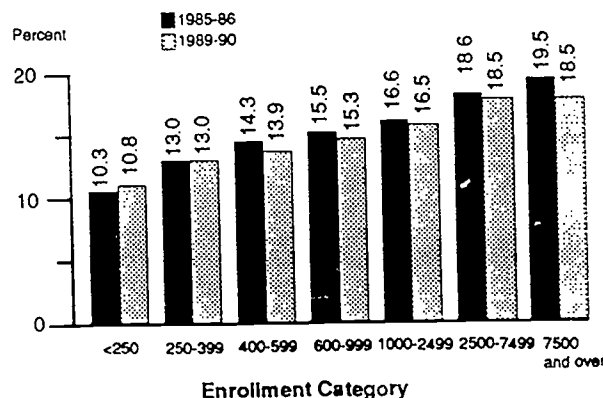
PUPIL TEACHER RATIOS

In 1985-86 public school pupil-teacher ratios for the state ranged from an average of 18.3:1 in first grade to 13.9:1 in grade 12 (Appendix D, Table D-22). Kindergarten is excluded from this comparison because districts offer a variety of attendance alternatives. Average pupil-teacher ratios tended to be higher for larger districts (Figure 6). In 1989-90 state average pupil-teacher ratios ranged from 18.2:1 in grade 4 to 13.2:1 in grade 10 (Appendix D, Table D-23). The K-12 ratio decreased from 16.6:1 in 1985-86 to 16.3:1 in 1989-90. Ratios for grades 9-12 and K-6 also decreased during that period.

The percent of decrease in K-6, 9-12, and K-12 pupil-teacher ratios during the period ranged from 1.1 percent for K-6 ratios to 7.5 percent for 9-12 ratios. Overall K-12 ratios decreased 1.8 percent. The difference in K-6 pupil-teacher ratios between the largest and the smallest district enrollment categories decreased from a difference of 7.6 percentage points to a different of 7.5 percentage points. Differences in the extremes for 9-12 ratios and for K-12 ratios between 1985-86 and 1989-90 decreased from 10.8 to 10.0 and from 9.2 to 7.7 respectively.

Figure 6

Average K-12 Pupil-Teacher Ratio
1985-86 vs 1989-90



Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Average pupil-teacher ratios in nonpublic schools ranged from 28.6:1 in kindergarten in 1985-86 to 14.8:1 in grade 12 (Appendix D, Table D-24). The kindergarten pupil-teacher ratio decreased 10.1 percent to 25.7:1 in 1989-90, and grade 12 ratios decreased 12.8 percent to 12.9:1.

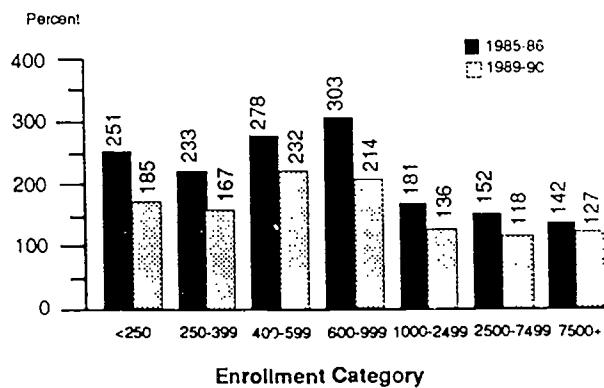
INSTRUCTIONAL AIDES

The state pupil-aid ratio averaged 182:1 in 1985-86 and 145:1 in 1989-90 (Appendix D, Table D-25). In 1985-86 the ratio was highest for districts with enrollments of 600 to 999 and lowest for districts with enrollments of 7,500 or more (Figure 7). In 1989-90 the pupil-aid ratio was highest in districts with enrollments of 400 to 599 and lowest in districts with enrollments of 2,500 to 7,499. Data for instructional aides for nonpublic schools were not available.

The average percent change in the number of instructional aides employed by public school districts increased 23.2 percent. Districts with enrollments under 250 accounted for the greatest increase, 43.1 percent (Figure 8). Districts with enrollments of 1,000 to 2,499 had the second largest increase, 35.7 percent. Districts with enrollments of 250 to 399 reported an increase of 34.4 percent.

Figure 7

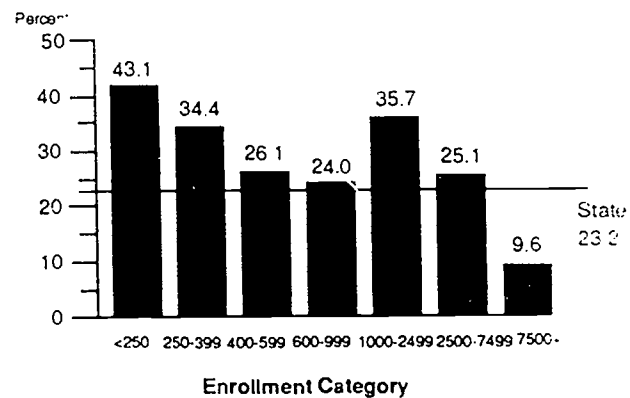
**Pupil-Aide Ratio in Public Schools
By Enrollment Category
1985-86 vs 1989-90**



Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Figure 8

**Percent Change in the Number of Public School
Instructional Aides From 1985-86 to 1989-90
By Enrollment Category**



Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Program

- The average number of total curriculum units increased 10.5 percent statewide. A wide variation existed in average units offered across enrollment categories both in 1985-86 and in 1989-90. Students in the largest districts had almost 3.5 times the average total offerings available to students in the smallest districts in 1989-90.
- Average unit offerings in English/language arts, mathematics, science, foreign language, and social studies increased between 1985-86 and 1989-90. The average number of vocational education units decreased between 1985-86 and 1989-90, although all enrollment categories had average unit offerings which were well above the minimum requirements in both years.
- The percentage of 9-12 students enrolled in calculus increased between 1985-86 and 1989-90 from 1.3 percent to 1.8 percent. Increases occurred in all but one enrollment category. The percentage of 9-12 students enrolled in trigonometry decreased from 3.4 percent to 3.3 percent. Increases occurred in three of seven enrollment categories. The percentage of 9-12 students enrolled in chemistry increased from 11.8 percent to 13.8 percent. Increases occurred for all enrollment categories. The percentage of 9-12 students enrolled in physics increased from 5.9 percent to 6.8 percent. The percentage of 9-12 students enrolled in foreign language increased from 30.8 percent to 46.9 percent. Increases occurred for all enrollment categories.

School district program offerings are described in this report as curriculum offerings available to students in grades 9-12. Curricular offerings provided by school districts serve as a measure of student opportunity.

Chapter 281-12.5(256) of the Iowa Code prescribes program standards to be met by Iowa school districts. In each high school program, grades 9-12, a minimum program is specified in terms of curriculum units. The requirements were revised in 1987-88. Table 1 represents the requirements for 1985-86 and 1989-90. Districts were given through 1989-90 to implement the new standards.

Table 1

**Comparison of Minimum Curriculum Unit Requirements
1985-86 vs 1989-90**

Subject Area	1985-86	1989-90	Unit Increase
English/Language Arts	5	6	1
Social Studies	4	5	1
Math	5	6	1
Science	4	5	1
Health & Physical Ed.	1	2	1
Fine Arts	1	3	2
Foreign Language	2	4	2
Vocational Education	5	5	0
Total	27	36	9

Source: Bureau of School Administration and Accreditation
Department of Education

Comparisons are made for total units offered and for English/language arts, mathematics, science, social studies, foreign language, and vocational education.

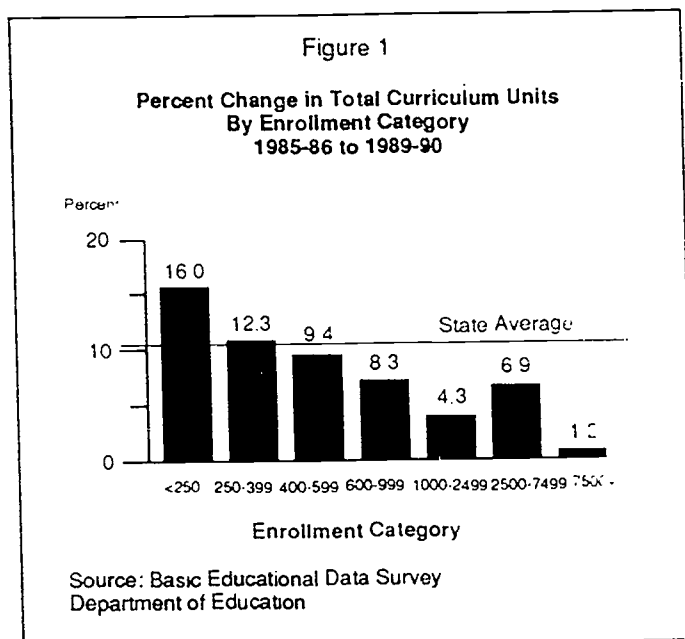
Enrollments in advanced courses were also investigated for mathematics (calculus and trigonometry) and science (chemistry and physics). All foreign language courses were also considered advanced. Because only approximately 40 nonpublic schools offer courses in grades 9 through 12, the results are limited to public school programs.

TOTAL CURRICULUM UNITS

An average of 54.2 units was provided to students during the 1985-86 school year (Appendix E, Table E-1). The median was 48.8. The average number of units varied widely across enrollment categories. The range in units was 272.8, with a minimum of 18.5 and a maximum of 291.3. Average units offered appeared to correspond directly with enrollment categories.

The state average for units offered in 1989-90 was 59.9 (Appendix E, Table E-2), a 10.5 percent increase. The median number of units offered increased 11.7 percent to 54.5 in 1989-90. Increases in the average total units offered for each of the seven enrollment categories were apparent (Figure 1). Per-

cent increases in total units from 1985-86 to 1989-90 were higher for the smaller enrollment categories. Districts with enrollments under 400 exceeded the state percent increase in total units of 10.5 percent. Increases for districts with enrollments of 1,000 and more were well below the state average increase.

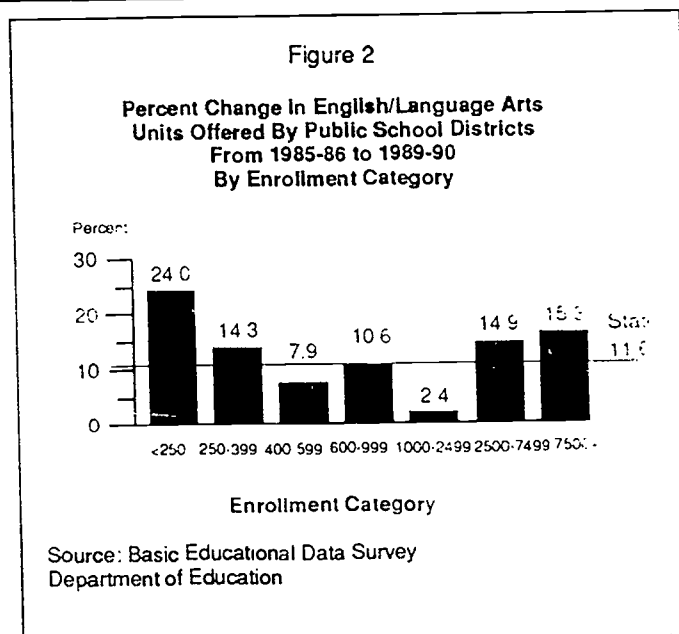


The range of units offered generally increased with higher enrollments. In 1989-90 the range in units offered was nearly twice as great in districts with enrollments of 1,000 to 2,499 than for districts with enrollments under 250. The range for districts with enrollments of 7,500 and over is nearly 5.5 times that of the range for the smallest enrollment category.

SUBJECT AREA CURRICULUM UNITS

English/Language Arts

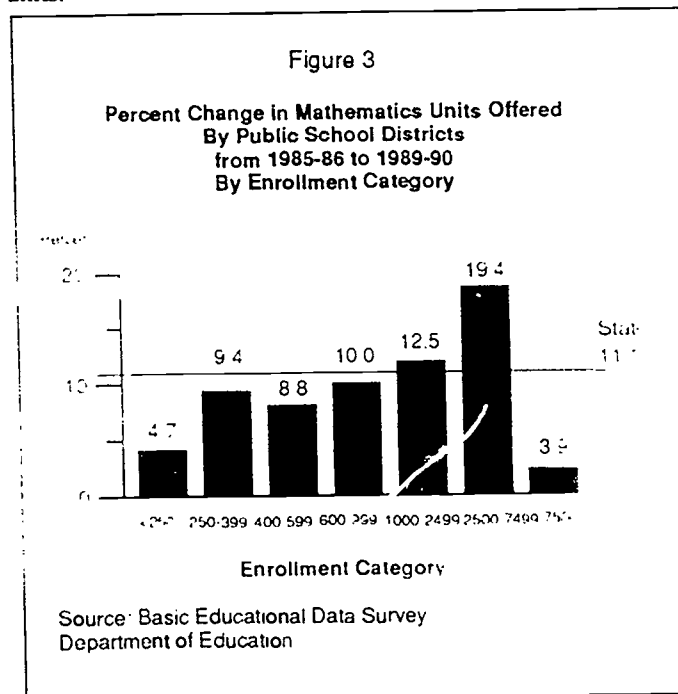
In 1985-86 the average units offered in English/language arts was 6.9. However, this average varied considerably across enrollment categories (Appendix E, Table E-3). Average units offered increased to 7.7 by 1989-90, an increase of 11.6 percent. Increases occurred in all enrollment categories, ranging from an increase of 2.4 percent in districts with enrollments of 1,000 to 2,499 to an increase of 24 percent in districts with enrollments of less than 250. During this period the minimum standard for English/language arts increased from five to six units.



Mathematics

Mathematics units averaged 7.2 across the state in 1985-86 and ranged from an average of 6.4 units in districts with enrollments under 400 to 12.7 in districts with enrollments of 7,500 or more (Appendix E, Table E-4). Average units offered were directly related to district enrollment.

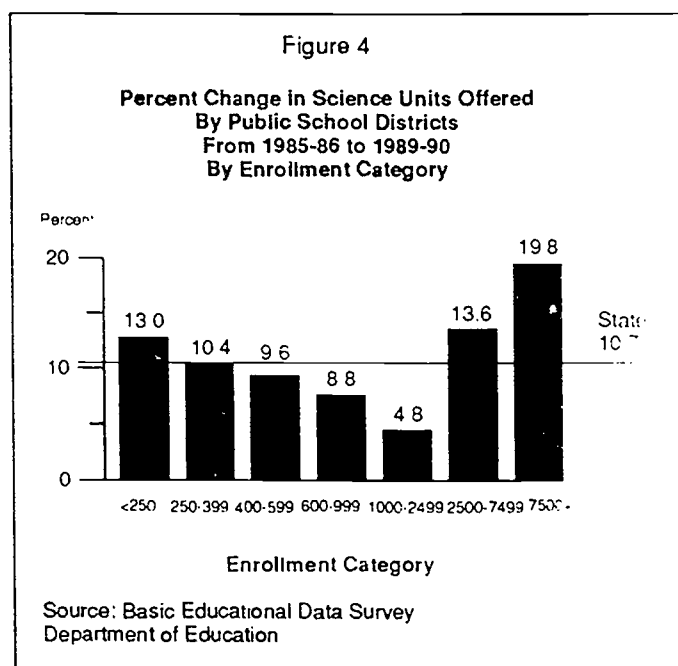
In 1989-90 the average number of mathematics units offered statewide increased 11.1 percent to 8 units. Increases across the 7 enrollment categories ranged from 3.9 percent in the largest districts to 19.4 percent in those with enrollments between 2,500 and 7,499 (Figure 3). Between 1985-86 and 1989-90, the minimum mathematics requirement increased from five to six units.



Science

The average number of science units offered statewide in 1985-86 was 5.6 and ranged from 4.6 in the smallest districts to 9.6 in the largest (Appendix E, Table E-5). In 1989-90, the state average was 6.2 units, with a range in average offerings from 5.2 in the smallest districts to 11.5 in the largest. In both 1985-86 and 1989-90, average units offered were directly related to district enrollment.

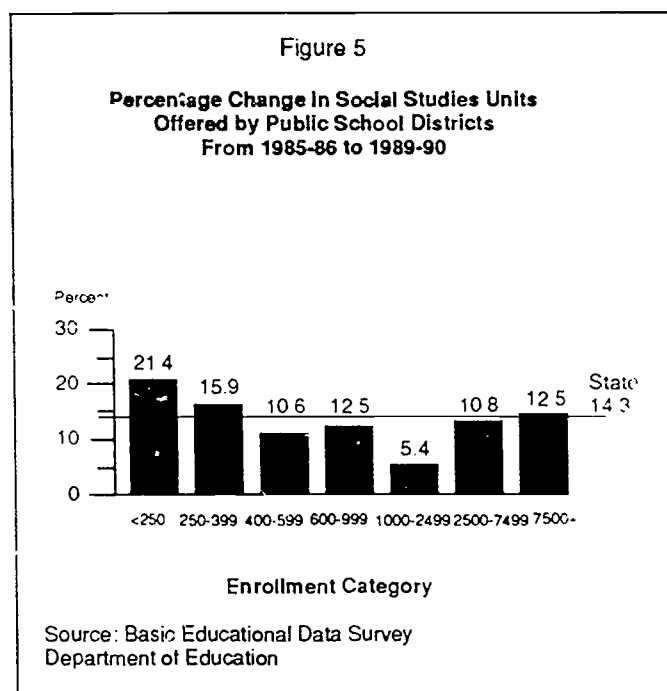
The average number of science units increased 10.7 percent statewide between 1985-86 and 1989-90, with increases occurring for all enrollment categories (Figure 4). Districts with enrollments under 250 and districts with enrollments of 2,500 and more realized increases above the state average, while increases in the remaining enrollment categories fell below the average increase for the state. The minimum requirement for science units offered increased from four to five in 1989-90.



Social Studies

The average units offered in social studies was 4.9 in 1985-86 (Appendix E, Table E-6) and ranged from 4.2 to 8.8 units. The state average in 1989-90 was 5.6 units. Average units offered in both years were again higher in districts with larger enrollments and lower in those with smaller enrollments.

Average units increased statewide by 14.3 percent (Figure 5). Increases ranged from over 21 percent in districts with enrollments under 250 to 5.4 percent in districts with enrollments from 1,000 to 2,499. During this period the minimum standard for social studies increased from four to five units.



Foreign Languages

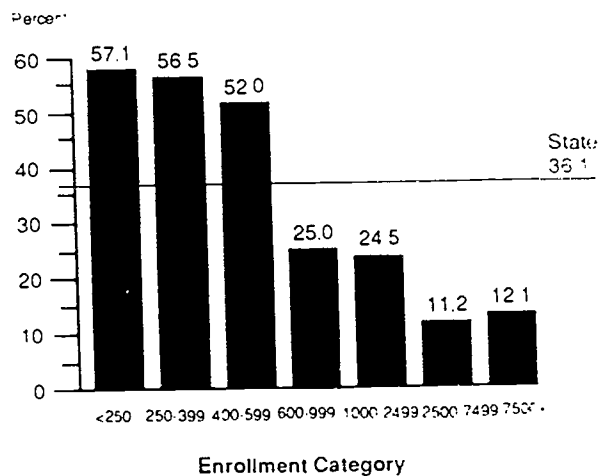
The minimum standard for foreign language units increased from two units in 1985-86 to four units in 1989-90. In 1989-90, districts could seek permission from the State Board of Education to waive compliance with the standard. Approximately 150 districts were granted waivers. This is reflected in the average number of units offered, primarily in districts with enrollments less than 600 (Appendix E, Table E-7).

The average number of foreign language units offered statewide was 3.6 in 1985-86, ranging from an average of 2.1 in the smallest districts to 14.9 in districts with enrollments of 7,500 and more. The average increased with each successive increase in total enrollments. The state average was 4.9 units in 1989-90. The average for districts with enrollments below 600 was below the minimum requirement due to the waiver provision.

The average units offered increased 36.1 percent between 1985-86 and 1989-90 (Figure 6). The percent change ranged from an increase of 57.1 percent in the smallest districts to 11.2 percent in districts with enrollments between 250 and 7,499.

Figure 6

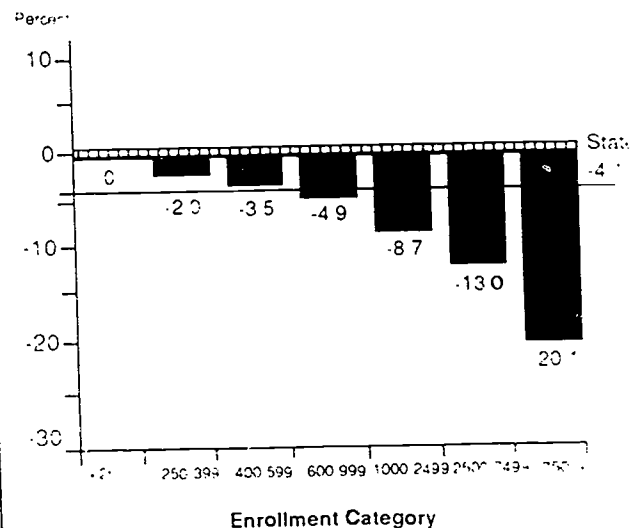
Percent Change in Foreign Language Units
Offered by Public School Districts
From 1985-86 to 1989-90
By Enrollment Category



Source: Basic Educational Data Survey
Department of Education

Figure 7

Percent Change in Vocational Education Units Offered
By Public School Districts
From 1985-86 to 1989-90
By Enrollment Category



Source: Basic Educational Data Survey
Department of Education

Vocational Education

The state average for vocational education units offered was 19.5 in 1985-86 (Appendix E, Table E-8). Average units varied nearly 5.4 to 1 across school district size categories. The average number of units offered was directly related to district enrollment. In 1989-90 the average units offered decreased to 18.7 units, a decrease of 4.1 percent. Average vocational education units decreased slightly for all but the smallest enrollment category, where average units remained unchanged. Minimum unit requirements remained constant across the time period.

The area of vocational education was the only subject matter area which reflected decreases in average units offered from 1985-86 to 1989-90. However, it should be noted that the average units offered in districts of all sizes exceeded the requirements in both 1985-86 and 1989-90. The lowest average units offered was more than 2.5 times the minimum requirement both years.

The average percent change in units offered decreased by 4.1 percent for the state and varied across enrollment categories from no change to a decrease of over 20 percent in the largest enrollment category (Figure 7).

ADVANCED COURSES

Mathematics

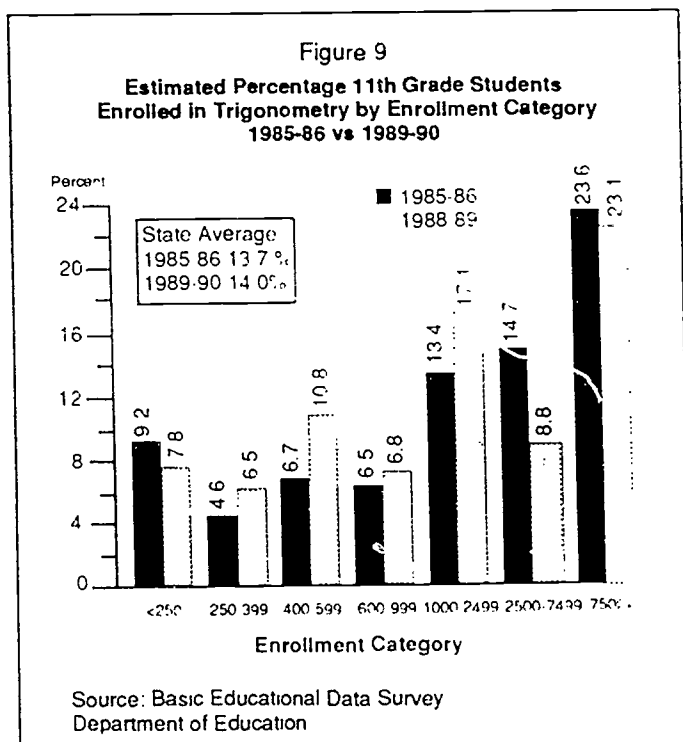
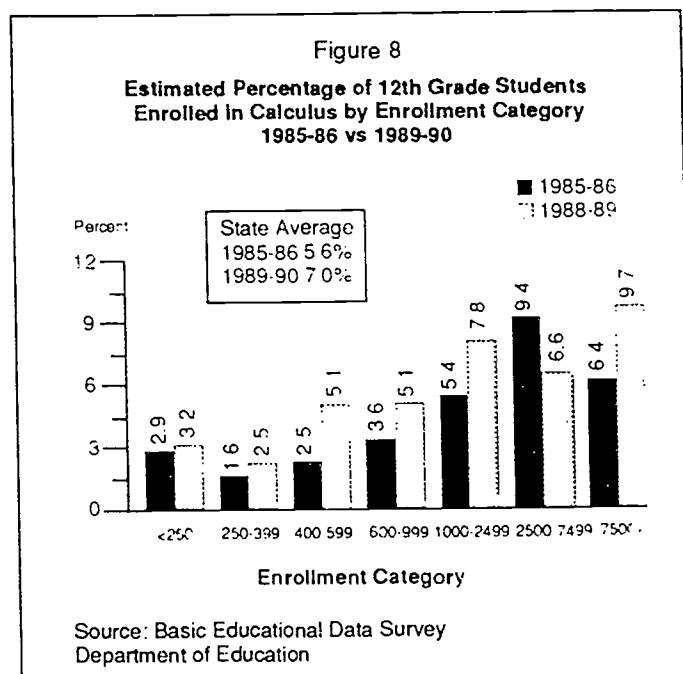
Calculus. In 1985-86, a total of 2,004 students were enrolled in calculus. The assumption was made that calculus is generally taken in grade 12. Based on this assumption, it is estimated that 5.6 percent of 12th grade students were enrolled in calculus (Appendix E, Table E-9). A total of 92 districts offered calculus.

In 1989-90, 2,358 students, or an estimated 7.0 percent of 12th grade students, from 127 districts were enrolled in calculus (Appendix E, Table E-10). The percentage of students enrolled in calculus increased in all but one enrollment category (Figure 8).

Trigonometry. In 1985-86, just over 5,100 students from 134 districts were enrolled in trigonometry (Appendix E, Table E-11). Assuming that trigonometry is most often taken in grade 11, it is estimated that 13.7 percent of 11th grade students were enrolled in trigonometry. Percentages across enrollment categories varied from 4.6 percent in districts with total enrollments of 250-399 to 23.6 percent in districts with total enrollments of 7,500 or more.

In 1989-90, 4,392 students from 133 districts were enrolled in trigonometry. This represents an estimated 14.0 percent of 11th grade students (Appendix E, Table E-12). Decreases

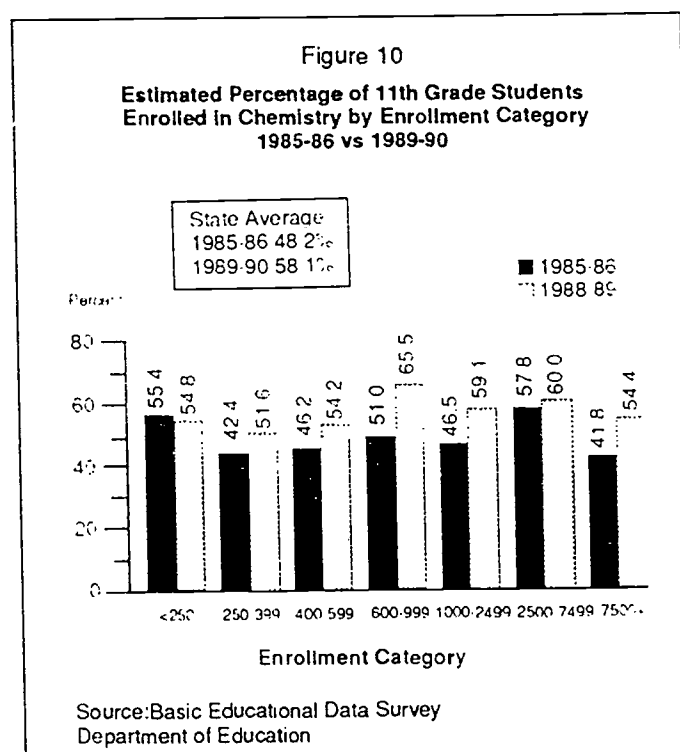
occurred in three enrollment categories (Figure 9): districts with enrollments under 250, districts with enrollments of 2,500 to 7,499, and districts with enrollments of 7,500 and over. Increases occurred in the four remaining enrollment categories.



Science

Chemistry. In 1985-86, just under 18,000 students were enrolled in chemistry (Appendix E, Table E-13). Assuming that chemistry is generally taken by students in grade 11, an estimated 48.2 percent of 11th grade students were enrolled in chemistry statewide. The estimated percentage varied from 41.8 percent in districts with enrollments of 7,500 or more to 57.8 percent for districts with enrollments of 2,500 to 7,499.

By 1989-90, increases in chemistry enrollment were evident in all but the smallest enrollment category, which decreased slightly (Figure 10). Statewide, the estimated percentage of 11th graders enrolled in chemistry increased from 48.2 percent in 1985-86 to 58.1 percent in 1989-90. The largest increases occurred in districts with enrollments of 600 to 999, of 1,000 to 2,499, and of 7,500 or more.

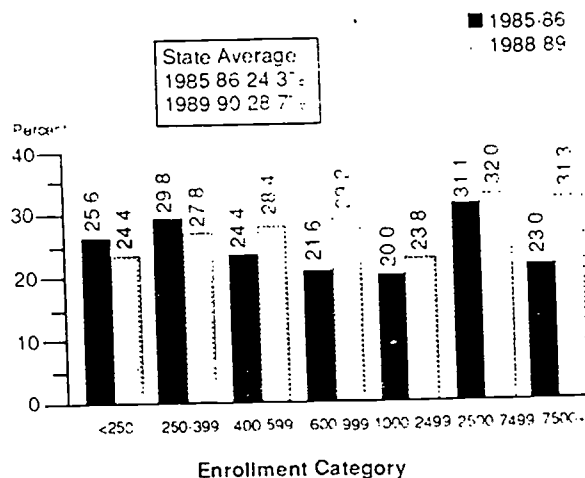


Physics. In 1985-86, about 9,000 high school students were enrolled in physics (Appendix E, Table E-15). Assuming that physics is generally taken by students in grade 11, an estimated 24.3 percent of 11th grade students were enrolled in physics. Across enrollment categories, percentages varied from a low of 20 percent in districts with enrollments of 1,000 to 2,499, to 31.1 percent in districts with enrollments of 2,500 to 7,499.

In 1989-90, physics enrollments increased statewide to an estimated 28.7 percent of 11th grade students (Appendix E, Table E-16). Increases occurred for all districts with enrollments of 600 and above, while slight decreases occurred for districts with enrollments below 600. The most substantial increases in physics enrollment occurred for districts with enrollments of 7,500 and over and for districts with enrollments of 600-999 (Figure 11).

Figure 11

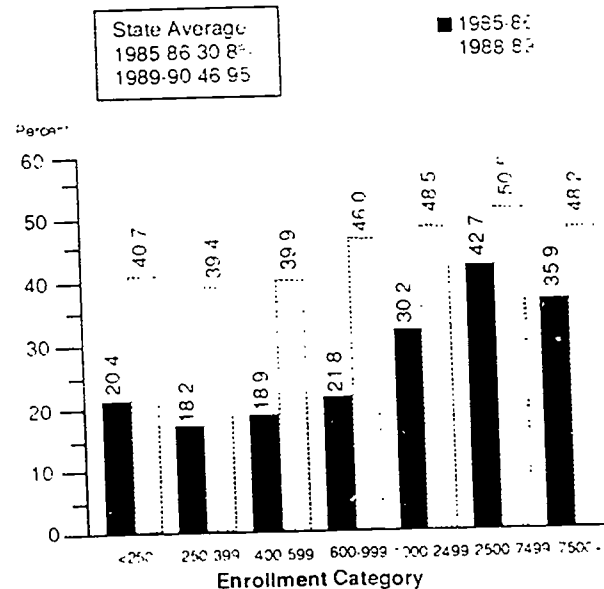
Estimated Percentage of 11th Grade Students
Enrolled in Physics by Enrollment Category
1985-86 vs 1989-90



Source: Basic Educational Data Survey
Department of Education

Figure 12

Percent of 9-12 Students Enrolled in Foreign Language
By enrollment Category
1985-86 vs 1989-90



Source: Basic Educational Data Survey
Department of Education

Foreign Languages

In 1985-86, 30.8 percent of 9-12 students were enrolled in foreign language courses (Appendix E, Table E-17). The percentages across the seven district size categories ranged from 18.2 in districts with total enrollments between 250 and 399, to 42.7 in districts with total enrollments between 2,500 and 7,499. In 1989-90 the percentage was 46.9 statewide (Appendix E, Table E-18).

Enrollment increases occurred in all district size categories (Figure 12). The largest generally occurred in districts with total enrollments less than 1,000. Increases for foreign language enrollment surpassed increases in the advanced math and science areas reported.

Iowa Education: A History

The United States Constitution gives the states responsibility for providing public education. In general the states created three entities to meet this responsibility: local school districts to administer and operate schools, intermediate units to provide support services, and state education agencies to carry out statutory, regulatory, and leadership functions. The evolution of each state's system is unique and provides a significant historical context for interpreting current information.

LOCAL SCHOOL DISTRICTS

The evolution of local school districts in Iowa has been influenced by both social and legislative factors. Prior to statehood, schools were created by individual community initiatives but had no general legal framework. At the time of Iowa statehood in 1846, 416 legally constituted districts existed.

From 1858 to 1872, the township was the legal entity for organizing school districts and taxing to pay for them. Legislation in 1872 permitted the subdivision of townships to create school districts, and fragmentation of the existing system resulted. By 1900 over 16,000 schools were operating, almost 13,000 of which were one-room, rural schools.

During the consolidated school movement of 1900 to 1922, legislation provided financial incentives to districts for offering designated courses and for having adequate facilities and equipment and certified teachers in specified subjects. Between 1922 and 1953, approximately 5,000 districts existed, although numerous one-room, rural schools closed as the result of 1945 legislation. The community school movement began in 1953 with legislation that encouraged school reorganization in order to create equal educational opportunities for all students through efficient and economical districts. A 1965 law required all areas of the state to become part of a district maintaining a high school by 1967. As a result, almost 600 additional districts were eliminated.

Since 1965 Iowa public schools have experienced steady declines in enrollment. This has had a significant impact on the ability of some districts to maintain the breadth of academic programming necessary to ensure quality education. As a result, districts have implemented alternative organizational structures to increase efficiency, including arrangements to share grade levels between two or more districts.

In 1989-90, there were 431 public school districts and 226 approved nonpublic schools serving more than 524,000 students in prekindergarten through grade 12. Eighty-four districts participated in whole-grade sharing arrangements, and 100 jointly

employed superintendents. All districts were governed by elected lay boards of education. By law, each board makes rules for its own governance and for the care of its property, determines the number of schools for the district, and determines which school pupils will attend.

THE INTERMEDIATE UNIT

The office of county superintendent of schools was created by the General Assembly in 1858. The initial function of this office was to supervise the rural schools in the respective counties. An 1862 law made the county superintendent an independently elected county official.

From 1858 to 1882 the county superintendent had sole authority to examine teachers and issue certificates. In 1882 the State Board of Education Examiners was created and shared the certification role with the county superintendents. In 1906 the certification role was turned over to the State Board of Education, but the county superintendent continued to administer certification examinations. In 1945 the role of the county superintendent was changed ensuring that all teachers in the county were properly certified and approved.

In 1947 the Code of Iowa created county boards of education. A major responsibility of the boards was to conduct comprehensive studies within each county leading to the development of a plan for district reorganization. While the county boards were examining local district structure, there were also moves to change the structure of the county office. In 1957 the legislature made it possible for one county superintendent to serve two or more adjacent counties. In 1965 two or more adjacent county systems were allowed to merge into one school system employing one county superintendent.

The county school system was abolished in 1975 and replaced by a system of 15 area education agencies (AEAs) with boundaries the same as those of the previously established system of merged area schools. The AEAs are governed by a board of directors elected from director districts by members of

local district boards of education. The AEAs provide special education and media services to local school districts and, within the limits of available funds, other education services. AEAs are funded from flow-through monies from local school districts as part of the state foundation program. In the past 15 years there have been some minor revisions to the system, but no major modifications have been made.

THE STATE EDUCATION AGENCY

The state education agency in Iowa consists of a governing board, a chief school officer, and the Department of Education.

The State Board. The first governing board, the State Board of Education, was created by the General Assembly in 1857 to establish a permanent system of public education in Iowa. This board directed education in the state until its abolition in 1864.

In 1953 the General Assembly established the board as the State Board of Public Instruction, consisting of nine members, eight elected and one appointed by the governor. Members served six-year terms and could not succeed themselves in office. This board was authorized to appoint a state superintendent of public instruction, subject to Senate confirmation. The election of board members remained in effect until 1967 when legislation provided that all nine members be appointed by the governor, subject to Senate confirmation.

Legislation in 1953 expanded the role of the State Board of Public Instruction by having it also serve as the State Board of Educational Examiners and the State Board of Vocational Education. Before 1953, these had been independent state boards.

In 1986 the executive branch of state government was reorganized. Although the State Board of Education remained intact, the authority to appoint the state superintendent was transferred to the governor. In addition, its duties were limited to determining policy for the Department of Education and the K-12 schools and community colleges. It retained its functions as the State Board of Educational Examiners and the State Board of Vocational Education. The State Board of Educational Examiners has since become an independent body.

Chief School Officer. In 1841, the Territorial Assembly created the office of superintendent of public instruction; however, the office was abolished in 1842. Similarly, although the first Iowa constitution provided for the election of a superintendent of public instruction, the revised constitution, ratified in 1857, discontinued the office and transferred the responsibilities to a state board of education.

In 1864, the General Assembly abolished the State Board of Education and provided for the election of a superintendent of public instruction. With the exception of the period from 1913 to 1918, the office remained elective until the reorganization of the Department in 1955.

In the 1986 reorganization of state government, the superintendent of public instruction became the director of education and the qualifications of the position were modified. There is also no longer a set term for the position; instead, the director serves at the pleasure of the governor. The director acts as the executive officer of the State Board of Education.

Department of Education. In 1913 the General Assembly created the Department of Public Instruction to provide support to the state superintendent. During the reorganization of state government in 1986, the name of the agency was changed to the Department of Education. Since its creation, the Department has become one of the largest agencies in state government, serving students, teachers, administrators, and parents.

Over 630 people are currently employed in five divisions which provide services in community college leadership, instruction, planning and accountability, professional and administrative support, and vocational rehabilitation.

The Department's mission is "to champion excellence in education through superior leadership and service. We are committed to ensuring that all have access to a network of services that allow them to realize their potential. Through education, we strive to build a quality of life which sets the standard for the nation."

The three major functions of the Department are leadership, regulation, and operation. Leadership activities improve education in Iowa through planning, research, advisory services, coordination of educational efforts, and development of informational programs. Regulatory activities ensure minimum standards of education for Iowa's students through the enforcement of statutory requirements. Operational services are those which require a statewide base because of their staffing, expense, or technical nature; the distribution of state funds to school districts and community colleges is an example.

Annually, as part of its leadership function, the Department does long-range planning in order to guide numerous activities and initiatives toward common goals. The Department's goals for 1990-91 are to increase the level of learning and achievement of all students to their maximum potential; to increase the productivity and capacity of human resources in the state's education system; to transform the education system at the building, district, regional, and state levels to support the teaching and learning process; and to provide leadership to improve Iowa education through systematic planning and quality assurance.

Appendix A: Pupil Outcomes

Table A-1

**Composite ACT Scores 1979-80 through 1988-89
Iowa and the Nation**

Year	Students Tested Iowa	Percent Tested Iowa	Average Composite Iowa	Average Composite Nation
1979-80	24931	50.5	20.5	18.5
1980-81	25719	53.2	20.3	18.5
1981-82	24736	52.6	20.3	18.4
1982-83	25486	57.5	20.2	18.3
1983-84	25573	61.0	20.2	18.5
1984-85	23440	57.8	20.3	18.6
1985-86	22459	57.9	20.6	18.8
1986-87	23169	59.2	20.3	18.7
1987-88	23999	60.3	20.3	18.8
1988-89	23446	60.5	20.1	18.6

Source: American College Testing Program

Table A-3

**Average Daily Attendance as a
Percent of Average Daily Membership
(Attendance Rates 1985-86 vs 1988-89)**

	1985-86			1988-89			% Change
	ADA	ADM	Rate	ADA	ADM	Rate	
State	453922	476363	95.3	448995	472443	95.0	-0.3
<250	9387	9794	95.8	9970	10431	95.6	-0.2
250-399	27418	28569	96.0	26940	28086	95.9	-0.1
400-599	44296	46187	95.9	45946	47972	95.8	-0.1
600-999	68708	71654	95.9	62189	64929	95.8	-0.1
1000-2499	103226	107909	95.7	105567	110787	95.3	-0.4
2500-7499	68943	93671	94.9	86251	91220	94.6	-0.3
7500+	111944	118579	94.4	112131	119018	94.2	-0.2

Source: 1988-89 Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table A-2

**Average Composite Score for SAT
1984-85 - 1988-89**

Year	Percent Tested Iowa	Average Composite Iowa		Average Composite Nation	
		Verbal	Math	Verbal	Math
1984-85	NA	521	576	431	475
1985-86	NA	519	576	431	475
1986-87	3	515	574	430	476
1987-88	5	513	577	428	476
1988-89	5	512	572	427	476

Source: Scholastic Aptitude Testing Program

Appendix B: Enrollments

Table B-1

Public School Enrollments 1985-86 vs 1989-90

Grade Level	1985-86	1989-90	Difference	% Change
K	40,925	38,136	-2789	-6.81
1	38,110	38,181	71	0.18
2	35,387	37,088	1701	4.81
3	34,508	37,690	3182	9.22
4	32,977	37,298	4321	13.1
5	33,327	35,598	2271	6.81
6	32,038	34,654	2616	8.16
7	32,653	34,743	2090	6.4
8	35,136	33,143	-1993	-5.67
9	39,688	35,041	-4647	-11.71
10	39,337	32,489	-6848	-17.41
11	37,203	31,472	-5731	-15.4
12	35,906	33,795	-2111	-5.88
Other	18,481	18,882	401	2.2
Total	485,676	478,210	-7466	-1.54

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table B-3

**Public School Prekindergarten Enrollments
By Enrollment Category
1985-86 vs 1989-90**

Public	1985-86	1989-90	% Increase
State	974	1,536	57.7
<250	70	151	115.7
250-399	67	297	343.3
400-599	14	108	671.4
600-999	72	85	18.1
1000-2499	124	133	7.3
2500-7499	271	350	29.2
7500+	356	412	15.7
Nonpublic	532	1,926	262.0

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table B-2

Nonpublic School Enrollments 1985-86 vs 1989-90

Grade Level	1985-86	1989-90	Difference	% Change
Pre K	532	1,926	1,394	262.0
K	4,034	3,893	-141	-3.5
1	4,918	4,610	-308	-6.26
2	4,752	4,711	-41	-0.86
3	4,634	4,591	-42	-0.91
4	4,159	4,573	414	9.95
5	4,167	4,230	63	1.51
6	3,804	3,865	61	1.6
7	3,347	3,296	-51	-1.5
8	3,404	3,037	-367	-10.8
9	2,842	2,457	-385	-13.5
10	3,062	2,281	-781	-25.51
11	2,992	2,179	-813	-27.17
12	2,911	2,309	-602	-20.68
Total	49,026	46,033	-2,993	-6.1

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Appendix C: School Finance

Table C-1

**Federal Revenue by Enrollment Category
1985-86 vs 1988-89**

	1985-86		1988-89	
	Revenue	Percent of Total Revenue	Revenue	Percent of Total Revenue
State	\$38,069,194	2.59	\$41,722,086	2.36
<250	978,916	2.74	1,122,502	2.31
250-399	2,696,293	2.94	2,747,072	2.47
400-599	3,777,819	2.69	4,196,496	2.31
600-999	5,970,969	2.77	5,639,528	2.36
1000-2499	7,821,521	2.44	8,525,657	2.12
2500-7499	5,391,292	1.87	5,594,515	1.69
7500 +	\$11,432,384	3.01	\$13,896,310	3.07

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table C-3

**Assessed Valuation Per Certified Enrollment
1985-86 vs 1988-89**

	1985-86	1988-89	% Change
State	146,357	147,104	5
<250	291,357	251,447	-10.2
250-399	222,005	215,612	-2.8
400-599	181,705	173,313	-4.6
600-999	165,778	160,603	-3.1
1000-2499	144,445	142,288	-1.5
2500-7499	119,929	129,409	7.9
7500 +	112,754	121,127	7.43

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

a. Assessed Valuation as of 1/84 and 1/87

Table C-2

**Intermediate Revenue by Enrollment Category
1985-86 vs 1988-89**

	1985-86		1988-89	
	Revenue	Percent of Total Revenue	Revenue	Percent of Total Revenue
State	\$7,380,785	0.5	\$9,332,493	0.5
<250	53,549	0.15	50,743	0.11
250-399	82,821	0.03	82,313	0.07
400-599	266,523	0.19	448,525	0.23
600-999	623,046	0.29	741,402	0.31
1000-2499	691,294	0.22	1,252,734	0.31
2500-7499	474,493	0.16	502,362	0.15
7500 +	\$5,189,059	1.37	6,254,402	1.35

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table C-4

**State Revenue by Enrollment Category
1985-86 vs 1988-89**

	1985-86		1988-89	
	Revenue	Percent of Total Revenue	Revenue	Percent of Total Revenue
State	\$645,470,971	43.85	\$910,462,041	51.61
<250	7,539,710	21.07	19,050,847	39.25
250-399	27,966,954	30.49	46,520,458	41.81
400-599	53,306,381	37.99	87,901,569	48.45
600-999	87,832,596	40.76	118,755,057	49.81
1000-2499	143,453,456	44.73	210,503,402	52.41
2500-7499	140,290,700	48.59	178,259,252	53.96
7500 +	\$185,081,174	48.80	\$249,471,456	55.14

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Does Not Include Tax Credit

Table C-5

**Number, Amount and Passage Rate of Bond Issues By Enrollment Category
1985-86 vs 1988-89**

	1985-86			1988-89		
	Number	Amount	Passage Rate	Number	Amount	Passage Rate
State	10	\$30,210,000	40%	35	\$112,988,440	62.90%
<250	1	350,000	100%	0	0	—
250-399	3	3,665,000	66.70%	1	1,840,000	100%
400-599	0	0	—	6	9,668,440	66.70%
600-999	2	6,595,000	50%	9	19,740,000	77.80%
1000-2499	2	6,100,000	0%	15	61,355,000	60%
2500-7499	1	3,500,000	0%	3	15,485,000	0%
7500+	1	\$10,000,000	0%	1	\$4,900,000	100%

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table C-6

**Object Categories as a Percent of Operating Expenditures
By Enrollment Category
1985-86**

Object Category	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Salaries	68.1	65.1	64.9	66	65.1	68.1	69.8	70.3
Benefits	12.9	11.4	11.8	12	12	12.6	13.4	14.2
Purchased Services	9.9	11.2	11.2	11.4	11.4	9.9	8.9	8.8
Supplies	5.7	8.3	7.9	6.6	7.1	5.9	5	4
Capital Outlay	2.6	2.8	3.1	3.1	3.5	2.8	2.2	1.9
Other Expenses	0.8	1.2	1.1	0.9	0.9	0.7	0.7	0.8

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table C-7

**Object Categories as a Percent of Operating Expenditures
By Enrollment Category
1988-89**

Object Category	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Salaries	68.4	62.5	65.4	65.9	66.2	68.5	70.4	70.6
Benefits	13.6	11.9	12.4	12.6	12.8	13.2	13.8	15.3
Purchased Services	9.5	14.2	11.1	11.3	10.6	9.2	8.4	8.4
Supplies	5.3	7.0	6.9	6.2	6.4	5.5	4.8	3.8
Capital Outlay	2.5	3.2	3.0	3.2	3.1	2.9	2.1	1.5
Other Expenses	0.7	1.2	1.1	0.8	0.8	0.7	0.5	0.4

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table C-8

**Percent Change In Per Pupil Expenditures For Object Categories
1985-86 to 1988-89**

Object Category	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Salaries	23.3	22.2	27.6	24.8	25.5	23.5	20.9	23.3
Benefits	29.9	32.6	34.1	32.1	32.6	28.8	24.4	31.1
Purchased Services	18.0	61.0	25.9	23.8	15.7	14.5	13.2	16.4
Supplies	13.3	8.7	10.6	16.5	10.3	15.6	13.9	15.9
Capital Outlay	15.2	42.9	23.7	30.1	8.5	23.8	16.9	-3.4
Other Expenses	-4.0	31.7	32.4	10.7	7.4	13.6	-13.6	-37.5

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table C-9

**Object Category Expenditures Per Certified Enrollment
1985-86**

Object Category	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Salaries	\$2,065	\$2,271	\$2,016	\$1,994	\$1,937	\$1,998	\$2,099	\$2,196
Benefits	391	399	364	361	356	368	401	443
Purchased Services	300	392	348	344	337	290	266	275
Supplies	173	288	246	200	213	173	151	126
Capital Outlay	79	98	97	93	106	84	65	58
Other Expenses	\$25	\$41	\$34	\$28	\$27	\$22	\$22	\$24

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table C-10

**Object Category Expenditures Per Certified Enrollment
1988-89**

Object Category	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Salaries	\$2,546	\$2,775	\$2,573	\$2,489	\$2,431	\$2,468	\$2,537	\$2,685
Benefits	508	529	488	477	472	474	499	581
Purchased Services	354	631	438	426	390	332	301	320
Supplies	196	313	272	233	235	200	172	146
Capital Outlay	91	140	120	121	115	104	76	56
Other Expenses	\$24	\$54	\$45	\$31	\$29	\$25	\$19	\$15

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table C-11

Operation and Maintenance Expenditures Per
Certified Enrollment 1985-86 vs 1988-89

	1985-86	1988-89
State	371	393
<250	381	392
250-399	351	366
400-599	340	362
600-999	360	375
1000-2499	345	369
2500-7499	372	386
7500 +	415	451

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table C-14

Total Administrative Expenditures as a
Percent of Total Operating Fund Expenditures
1985-86 vs 1988-89

	1985-86	1988-89	Percent Change
State	10.2	9.9	-2.9
<250	13.0	12.2	-6.2
250-399	12.0	12.0	0.8
400-599	11.9	11.3	-4.2
600-999	10.6	10.2	-3.0
1000-2499	10.2	10.0	-2.0
2500-7499	9.6	9.2	-4.2
7500 and over	8.9	8.7	-2.2

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table C-12

Operation and Maintenance Expenditures
As a Percent of Total Operating Expenditures
1985-86 vs 1988-89

	1985-86	1988-89	Percent Change
State	12.2	10.6	-13.1
<250	10.9	8.8	-18.3
250-399	11.3	9.3	-17.7
400-599	11.3	9.6	-15
600-999	12.1	10.2	-15.7
1000-2499	11.7	10.3	-12
2500-7499	12.4	10.7	-13.7
7500 and over	13.3	11.9	-10.5

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table C-15

Instructional Expenditures
Per Certified Enrollment
1985-86 vs 1988-89

	1985-86	1988-89
State	\$1,981	\$2,508
<250	2,246	2,954
250-399	1,981	2,595
400-599	1,950	2,532
600-999	1,902	2,456
1000-2499	1,926	2,432
2500-7499	1,998	2,465
7500 and over	\$2,052	\$2,559

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Table C-13

Total Administrative Expenditures
Per Certified Enrollment
1985-86 vs 1988-89

	1985-86	1988-89	Percent Change
State	308	367	19.2
<250	454	542	19.4
250-399	372	474	27.4
400-599	359	429	19.5
600-999	316	374	18.4
1000-2499	299	360	20.4
2500-7499	289	331	14.5
7500 and over	278	331	19.1

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table C-16

Instructional Expenditures as a
Percent of Total Operating Fund
1985-86 vs 1988-89

	1985-86	1988-89	Percent Change
State	65.3	67.4	3.2
<250	64.4	66.5	3.3
250-399	63.8	66.0	3.4
400-599	64.6	67.0	3.7
600-999	63.9	66.9	4.7
1000-2499	65.6	67.5	2.9
2500-7499	66.5	68.4	2.9
7500 and over	65.7	67.3	2.4

Source: Secretary's Annual Report
Department of Education
Bureau of Planning, Research and Evaluation

Appendix D: Staff

Table D-1

All Public School Certificated Staff Full and Part-Time, 1985-86 School Year

Position	Female		Male		Am. Indian		Asian Am.		Black		Hispanic		White		Total N
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Administrative Assistant	4	8	46	92.0	0	0.00	0	0	1	2.04	0	0.00	48	97.96	50
Administrator	1	16.7	5	83.3	0	0.00	0	0	1	16.67	0	0.00	5	83.33	6
Advisor	3	60.0	2	40.0	0	0.00	0	0	0	0.00	0	0.00	5	100.00	5
Asst. Principal	22	10.0	199	90.0	0	0.00	0	0	9	4.07	0	0.00	212	95.93	221
Asst. Superintendent	1	2.9	33	97.1	0	0.00	0	0	3	8.82	0	0.00	31	91.18	34
Asst Dean/Dir	3	42.9	4	57.1	0	0.00	2	0	0	0.00	0	0.00	5	71.43	7
Chairperson	4	100.0	0	0.0	0	0.00	0	0	0	0.00	0	0.00	4	100.00	4
Clinician	25	92.6	2	7.4	0	0.00	0	0	0	0.00	0	0.00	27	100.00	27
Consultant	30	73.2	11	26.8	0	0.00	0	0	0	0.00	0	0.00	41	100.00	41
Coordinator	70	44.9	86	55.1	0	0.00	2	0	0	0.00	2	1.28	152	97.44	156
Counselor	318	33.9	621	66.1	0	0.00	1	0	7	0.75	1	0.11	930	99.04	939
Director	14	11.8	105	88.2	0	0.00	0	0	3	2.52	0	0.00	116	97.48	119
Dept. Head	3	16.7	15	83.3	0	0.00	0	0	0	0.00	0	0.00	18	100.00	18
Educ. Strat	13	92.9	1	7.1	0	0.00	0	0	0	0.00	0	0.00	14	100.00	14
HM Invt PK Tech	9	100.0	0	0.0	0	0.00	0	0	0	0.00	0	0.00	9	100.00	9
Hosp/Home Tch	15	75.0	5	25.0	0	0.00	0	0	0	0.00	0	0.00	20	100.00	20
Instruct/Cons	53	71.6	21	28.4	0	0.00	0	0	0	0.00	1	1.35	73	98.65	74
Integrat Tch	593	83.1	121	16.9	0	0.00	0	0	3	0.42	0	0.00	711	99.58	714
Itinerant Tch	23	82.1	5	17.9	0	0.00	0	0	1	3.57	0	0.00	27	96.43	28
Librarian	655	88.6	84	11.4	0	0.00	1	0	5	0.68	1	0.14	732	99.05	739
Manager	0	0.0	1	100.0	0	0.00	0	0	0	0.00	0	0.00	1	100.00	1
Pre-Sch Tch	51	100.0	0	0.0	0	0.00	0	0	0	0.00	0	0.00	51	100.00	51
Principal	107	8.7	1120	91.3	0	0.00	0	0	18	1.47	2	0.16	1207	98.37	1227
Psychologist	13	76.5	4	23.5	0	0.00	0	0	1	5.88	0	0.00	16	94.12	17
Resource Tch	1327	87.8	185	12.2	1	0.07	7	0	7	0.46	2	0.13	1495	98.88	1512
Social Worker	14	77.8	4	22.2	0	0.00	0	0	1	5.56	1	5.56	16	88.89	18
Specialist	53	73.6	19	26.4	0	0.00	0	0	0	0.00	1	1.39	71	98.61	72
Supervisor	16	38.1	26	61.9	0	0.00	0	0	1	2.38	1	2.38	40	95.24	42
Supt	7	1.6	427	98.4	0	0.00	0	0	0	0.00	0	0.00	434	100.00	434
Self-Cont Tch	75	82.4	16	17.6	0	0.00	0	0	0	0.00	1	1.10	90	98.90	91
Self-Cont 2.2	550	86.3	87	13.7	0	0.00	1	0	8	1.26	0	0.00	628	98.59	637
Self-Cont. 3.6	236	81.9	52	18.1	0	0.00	1	0	4	1.39	0	0.00	283	98.26	288
Tch/Coord	1	100.0	0	0.0	0	0.00	0	0	0	0.00	0	0.00	1	100.00	1
Teacher	17775	62.8	10529	37.2	12	0.04	40	0.1	209	0.74	68	0.24	27975	98.84	28304
Therapist	5	83.3	1	16.7	0	0.00	0	0	0	0.00	0	0.00	6	100.00	6
Total	22089	61.5	13837	38.5	13	0.11	55	0.09	282	0.78	81	0.23	35494	98.80	35926

Table D-2

All Public School Certificated Staff Full and Part-Time, 1989-90 School Year

Position	Female		Male		Am. Indian		Asian Am.		Black		Hispanic		White		Total N
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Administrative Assistant	12	24.0	38	76.0	1	2.0	0	0.0	0	0.0	0	0.0	49	98.0	50
Administrator	9	17.6	42	82.4	0	0.0	0	0.0	2	3.9	0	0.0	49	96.1	51
Advisor	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	1
Asst. Principal	39	17.5	184	82.5	0	0.0	0	0.0	9	4.0	2	0.9	212	95.1	223
Asst. Superintendent	7	17.9	32	82.1	1	2.6	0	0.0	2	5.1	0	0.0	36	92.3	39
Asst Dean/Dir	3	50.0	3	50.0	0	0.0	2	33.3	0	0.0	0	0.0	4	66.7	6
Clinician	27	90.0	3	10.0	0	0.0	0	0.0	0	0.0	0	0.0	30	100.0	30
Consultant	36	81.8	8	18.2	0	0.0	0	0.0	0	0.0	0	0.0	44	100.0	44
Coordinator	93	50.3	92	49.7	0	0.0	0	0.0	1	0.5	1	0.5	183	98.9	185
Counselor	471	44.1	597	55.9	0	0.0	5	0.5	10	0.9	1	0.1	1052	98.5	1068
Director	26	18.7	113	81.3	0	0.0	0	0.0	4	2.9	0	0.0	135	97.1	139
Dept. Head	33	34.7	62	65.3	0	0.0	0	0.0	0	0.0	0	0.0	95	100.0	95
Educ. Strat	18	78.3	5	21.7	0	0.0	0	0.0	0	0.0	0	0.0	23	100.0	23
HM Invt PK Tech	10	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	100.0	10
Hosp/Home Tch	13	81.3	3	18.8	0	0.0	0	0.0	0	0.0	0	0.0	16	100.0	16
Instruct/Cons	44	77.2	13	22.8	0	0.0	0	0.0	0	0.0	0	0.0	57	100.0	57
Integrat Tch	714	81.9	158	18.1	3	0.3	4	0.5	5	0.6	1	0.1	859	98.5	872
Itinerant Tch	28	84.8	5	15.2	0	0.0	0	0.0	1	3.0	0	0.0	32	97.0	33
Librarian	617	88.0	84	12.0	0	0.0	0	0.0	4	0.6	1	0.1	696	99.3	701
Pre-Sch Tch	3	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	100.0	3
Principal	167	13.6	1057	86.4	4	0.3	0	0.0	22	1.8	6	0.5	1192	97.4	1224
Rcsource Tch	1292	87.8	179	12.2	3	0.2	5	0.3	5	0.3	1	0.1	1457	99.0	1471
Sch Soc Wrk	5	83.3	1	16.7	0	0.0	0	0.0	1	16.7	0	0.0	5	83.3	6
School Psychologist	11	73.3	4	26.7	0	0.0	0	0.0	1	6.7	0	0.0	14	93.3	15
Self-Cont Tch	2	66.7	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0	3	100.00	3
Self-Cont 2.2	585	87.2	86	12.8	0	0.0	2	0.3	4	0.6	1	0.1	664	99.0	671
Self-Cont. 3.6	282	84.2	53	15.8	0	0.0	2	0.6	4	1.2	1	0.3	328	97.9	335
Specialist	70	82.4	15	17.6	0	0.0	0	0.0	0	0.0	0	0.0	85	100.00	85
Supervisor	21	42.9	28	57.1	0	0.0	1	2.0	1	2.0	0	0.0	47	95.9	49
Supt.	9	2.3	374	97.7	0	0.0	0	0.0	0	0.0	0	0.0	383	100.00	383
Tch/Coord	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.00	1
Teacher	18286	65.0	9837	35.0	34	0.1	51	0.2	197	0.7	85	0.3	27756	98.7	28123
Therapist	2	66.7	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0	3	100.00	3
Total	22937	63.7	13078	36.3	46	0.1	72	0.2	273	0.8	100	0.3	35524	98.6	36015

Table D-3

All Nonpublic School Certificated Staff Full and Part-Time, 1985-86 School Year

Position	Female		Male		Am. Indian		Asian Am.		Black		Hispanic		White		Total N
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Administrative Assistant	0	0	1	100	0	0	0	0	0	0	0	0	1	100	1
Administrator	1	20.0	4	80.0	0	0	0	0	0	0	0	0	5	100	5
Advisor	1	100.0	0	0.0	0	0	0	0	0	0	0	0	1	100	1
Asst. Principal	8	42.1	11	57.9	0	0	0	0	0	0	0	0	19	100	19
Asst Dean/Dir	1	100.0	0	0.0	0	0	0	0	0	0	0	0	1	100	1
Clinician	1	100.0	0	0.0	0	0	0	0	0	0	0	0	1	100	1
Coordinator	7	87.5	1	12.5	0	0	0	0	0	0	0	0	8	100	8
Counselor	14	35.9	25	64.1	0	0	0	0	0	0	0	0	39	100	39
Director	4	57.1	3	42.9	0	0	0	0	0	0	0	0	7	100	7
Hosp/Home Tch	1	100.0	0	0.0	0	0	0	0	0	0	0	0	1	100	1
Instruct/Cons	2	66.7	1	33.3	0	0	0	0	0	0	0	0	3	100	3
Integrat Tch	2	100.0	0	0.0	0	0	0	0	0	0	0	0	2	100	2
Librarian	37	92.5	3	7.5	0	0	0	0	0	0	0	0	40	100	40
Pre-Sch Tch	1	100.0	0	0.0	0	0	0	0	0	0	0	0	1	100	1
Principal	95	49.5	97	50.5	0	0	0	0	0	0	0	0	192	100	192
Psychologist	0	0.0	1	100.0	0	0	0	0	0	0	0	0	1	100	1
Resource Tch	9	90.0	1	10.0	0	0	0	0	0	0	0	0	10	100	10
Specialist	2	100.0	0	0.0	0	0	0	0	0	0	0	0	2	100	2
Supervisor	1	33.3	2	66.7	0	0	0	0	0	0	0	0	3	100	3
Supt	0	0.0	2	100.0	0	0	0	0	0	0	0	0	2	100	2
Self-Cont Tch	13	92.3	1	7.1	0	0	0	0	0	0	0	0	14	100	14
Self-Cont 2.2	1	100.0	0	0.0	0	0	0	0	0	0	0	0	1	100	1
Self-Cont. 3.6	1	100.0	0	0.0	0	0	0	0	0	0	0	0	1	100	1
Teacher	2241	77.5	649	22.5	0	0	3	0.1	1	0.03	11	0.38	2875	99.48	2890
Total	2443	75.3	802	24.7	0	0	3	0.09	1	0.03	11	0.34	3230	99.54	3245

Table D-4

All Nonpublic School Certificated Staff Full and Part-Time, 1989-90 School Year

Position	Female		Male		Am. Indian		Asian Am.		Black		Hispanic		White		Total N
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Administrative Assistant	3.0	60.0	2.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	100.0	5.0
Administrator	9.0	42.9	12.0	57.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	100.0	21.0
Asst. Principal	5.0	31.3	11.0	68.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	100.0	16.0
Asst Dean/Dir	1.0	50.0	1.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	100.0	2.0
Clinician	0.0	0.0	1.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	100.0	1.0
Coordinator	5.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	100.0	5.0
Counselor	38.0	47.5	42.0	52.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	100.0	80.0
Director	5.0	45.5	6.0	54.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	100.0	11.0
Instruct/Cons	4.0	80.0	1.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	100.0	5.0
Integrat Tch	2.0	66.7	1.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	100.0	3.0
Librarian	66.0	90.4	7.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.0	100.0	73.0
Principal	84.0	46.9	95.0	53.1	0.0	0.0	1.0	0.6	0.0	0.0	0.0	0.0	179.0	99.4	179.0
Resource Tch	21.0	95.5	1.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	100.0	22.0
Specialist	5.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	100.0	5.0
Supervisor	3.0	75.0	1.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	100.0	4.0
Supt	0.0	0.0	6.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	100.0	6.0
Teacher	2242.0	79.0	597.0	21.0	3.0	0.1	2.0	0.1	2.0	0.1	7.0	0.2	2825.0	99.5	2839.0
Total	2493.0	76.1	784.0	23.9	3.0	0.1	3.0	0.1	2.0	0.1	7.0	0.2	3262.0	99.5	3277.0

Table D-5
Distribution of Teachers, Principals,
Superintendents and Total Staff

	Public			Non-Public		
	% Female	% Male	% Minority	% Female	% Male	% Minority
1985-86						
Teachers	62.8	37.2	1.16	77.5	22.5	0.52
Principals	18.7	91.3	1.63	49.5	50.5	0
Superintendent	1.6	98.4	0	0	100	0
Total Staff	61.5	38.5	1.2	75.3	24.7	0.46
1989-90						
Teachers	65	35	1.3	79	21	0.5
Principals	13.6	86.4	2.6	46.9	53.1	0.6
Superintendent	2.3	97.7	0	0		
Total Staff	63.7	36.3	1.4	76.1	23.9	0.5

Table D-7

Average Age of Fulltime Public School Staff
1985-86 vs 1989-90
By Enrollment Category

	Teachers		Superintendents		Principals	
	85-86	89-90	85-86	89-90	85-86	89-90
State	40	41.1	48.7	49.3	46.6	46.7
<250	36.5	37.7	48	51.1	41.9	43.1
250-399	37.7	39	46.6	47.4	43.1	44
400-599	38.3	39.6	48.2	50	44.2	44.6
600-999	39.1	40.2	49.5	49.4	46.3	46
1000-2499	40	41	51.2	48.9	47.8	47.7
2500-7499	40.9	42.1	49.5	49.6	47.5	48.2
7500 +	41.7	42.8	48	50.1	48.7	48.4

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table D-6
AEA Personnel

Position	1989-90 Total	1985-86 Total
Admin. Asst	4	2
Administrator	15	15
Asst Dean/Dir	18	17
Clinician Cer	557	577
Consultant	337	339
Coordinator	63	54
Dept Head	4	-
Director	44	47
Educ Stratg	21	19
HM Intv PK Tc	48	38
Hosp/Home Tch	7	8
Instr/Cons	70	42
Integrat Tch	68	60
Itinerant Tch	86	79
Librarian	1	1
Pre-Sch Teacher	-	53
Resource Tch	108	124
Sch Aud-Spr	1	1
Sch Soc Wkr	193	185
Sch Psych	315	319
School Audi C	12	-
Self-Cont 2.2	172	178
Self-Cont 3.6	58	35
Specialist	40	36
Supervisor	71	75
Teacher	33	5
Therapist	72	60
Missing	1	--
Total	2,419	2,374

Table D-8

Average Salary, Contract Days, Experience
And Age For Fulltime Nonpublic
Teachers, Principals and Superintendents
1985-86

	Salary	Contract Days	Total Experience	Direct Experience	Age
Teacher	\$13,449	190	11	5.7	36.6
Principal	\$14,100	211	21.3	6	46

Source: Basic Educational Data Survey
Department of Education

Table D-9

Average Salary, Contract Days, Experience
And Age For Fulltime Nonpublic
Teachers, Principals and Superintendents
1989-90

	Salary	Contract Days	Total Experience	Direct Experience	Age
Teacher	\$16,352	191	11.0	6.3	37.4
Principal	\$19,732	215	21.5	5.5	46.8

Source: Basic Educational Data Survey
Department of Education

Table D-10

**Fulltime Public School Teachers
Distribution by Degree Status
1985-86 vs 1989-90**

Degree Status	1985-86		1989-90	
	N	Percent	N	Percent
No Degree	69	0.2	45	0.2
Associate	1	<.1	1	<.1
Baccalaureate	21,176	70.9	20,254	69.6
Masters	8,475	28.4	8,658	29.8
Specialist	83	0.3	72	0.2
Doctorate	57	0.2	57	0.2
Total	29,861	100	29,087	100
Missing	82		4	

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table D-11

**Nonpublic Fulltime Teachers and Principals
Distribution by Degree Status
1985-86**

Degree Status	Teachers		Principals	
	N	%	N	%
No Degree	19	0.8	-	-
Associate	-	-	-	-
Baccalaureate	1,983	83.2	4	2.3
Masters	380	15.9	167	95.5
Specialist	-	-	2	1.1
Doctorate	3	0.1	2	1.1
Total	2,385	100	175	100
Missing	35	-	21	

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table D-12

**Nonpublic Fulltime Teachers and Principals
Distribution by Degree Status
1989-90**

Degree Status	Teachers		Principals	
	N	%	N	%
No Degree	14	0.6	-	-
Associate	-	-	-	-
Baccalaureate	2,002	85.9	8	5
Masters	314	13.5	151	93.8
Specialist	-	-	2	1.2
Doctorate	1	<.1	-	-
Total	2,331	100	161	100
Missing	15	-	27	

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table D-13

**Average District Experience of
Fulltime Public School Teachers
By Enrollment Category**

	1985-86	1989-90
State	10.6	11.5
<250	7.1	7.7
250-399	8.6	9.4
400-599	9.7	10.8
600-999	10.1	11.2
1000-2499	10.9	11.7
2500-7499	11.5	12.5
7500 and over	11.3	12.3

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table D-14

**Average Contract Days of
Fulltime Public School Teachers
1985-86 vs 1989-90**

	1985-86	1989-90
State	191.0	190.8
<250	190.4	189.4
250-399	190.5	190.5
400-599	190.7	190.7
600-999	191.3	190.7
1000-2499	191.3	191.3
2500-7499	191.3	191.2
7500 and over	190.9	190.6

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table D-15

**Average Salary of Fulltime
Public School Teachers
By Enrollment Category**

	1985-86	1989-90*	% Change
State	\$21690	\$26747	23.3
<250	16347	21538	31.8
250-399	17971	22559	25.5
400-599	19198	24098	25.5
600-999	20079	24976	24.4
1000-2499	21616	26697	23.5
2500-7499	23835	29250	22.7
7500 and over	24041	29317	21.9

* Does not include Phase III funds.

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table D-16**Public School Principals by Degree Status
1985-86 vs 1989-90**

Degree Status	1985-86		1989-90	
	N	%	N	%
No Degree	-	-	-	-
Associate	-	-	-	-
Baccalaureate	1	0.1	1	0.1
Masters	1061	87	1043	87.5
Specialist	99	8.1	104	8.7
Doctorate	59	4.8	44	3.7
Total	1220	100	1192	100
Missing	29	-	20	-

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table D-17**Average Salary, Contract Days, Experience and
Age of Fulltime Public School Principals
1985-86**

	Salary	Contract Days	Total Experience	District Experience	Age
State	\$35,313	223	21.9	13.2	46.6
<250	26,399	209	17.3	8	41.9
250-399	28,387	212	17.9	8	43.1
400-599	31,095	213	19.3	10	44.2
600-999	33,428	218	22.1	13.2	46.3
1000-2499	36,427	227	23.5	14.1	47.8
2500-7499	39,465	229	23.3	15.2	47.5
7500 and over	\$39,584	235	23.1	15.7	48.7

Table D-18**Average Salary, Contract Days, Experience and
Age of Fulltime Public School Principals
1989-90**

	Salary	Contract Days	Total Experience	District Experience	Age
State	\$42,462	225	22.1	12.6	46.7
<250	32,295	215	17.8	6.7	43.1
250-399	34,464	214	18.7	7.4	44.1
400-599	36,987	213	19.7	8.8	44.6
600-999	40,045	219	21.6	12.1	46.1
1000-2499	44,089	227	23.6	13.2	47.7
2500-7499	48,324	232	24.3	15.9	48.2
7500 and over	\$47,786	238	22.9	16.2	48.4

Source: Basic Educational Data Survey
Department of Education

Table D-19**Average Salary, Contract Days, Experience and
Age of Fulltime Public School Superintendents
1985-86**

	Salary	Contract Days	Total Experience	District Experience	Age
State	\$40,710	248	23.6	8.8	48.7
<250	33,597	245	22.1	6.4	47.9
250-399	34,060	247	21.8	7.6	46.6
400-599	39,213	247	22.9	8.8	48.2
600-999	41,482	249	24	10.2	49.5
1000-2499	47,288	251	26.2	9.9	51.2
2500-7499	55,110	255	25.1	9.3	49.5
7500 and over	\$62,235	253	24.9	6	48

Table D-20**Average Salary, Contract Days, Experience and
Age of Fulltime Public School Superintendents
1989-90**

	Salary	Contract Days	Total Experience	District Experience	Age
State	\$50,809	251	23.8	8.2	49.3
<250	42,929	243	24.8	7.1	51.1
250-399	43,297	248	22.5	7.1	47.4
400-599	47,524	250	24.5	9.2	50
600-999	50,498	252	24.1	9.7	49.4
1000-2499	57,008	254	23.1	7	48.9
2500-7499	67,377	256	25.6	8.5	49.6
7500 and over	\$75,234	256	22.6	6.3	50.1

Table D-21**Public School Superintendents by Degree Status
1985-86 vs 1989-90**

Degree Status	1985-86		1989-90	
	N	%	N	%
No Degree	-	-	-	-
Associate	-	-	-	-
Baccalaureate	-	-	1	0.3
Masters	208	49.1	183	50.3
Specialist	146	34.4	127	34.8
Doctorate	70	16.5	53	14.6
Total	424	100	364	100
Missing	13	-	67	-

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table D-22

**Average Pupil-Teacher Ratio 1985-86
By Enrollment Category
Public Schools**

Grade	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
K	31.5	20.6	22.7	26.4	27.7	32.9	37.8	35.9
1	18.3	13.6	17.6	16.8	17.1	17.9	19.4	20
2	17.8	13.1	16.1	16.6	17.2	17.3	19	19.5
3	17.7	13.2	16.4	16.2	16.9	17.2	18.9	19.7
4	17.3	11.5	16.2	15.5	16.5	16.8	18.5	19.4
5	16.7	11.6	16.3	15.7	16.3	16.9	17.3	17.7
6	16.4	10.9	14.4	14.8	16.1	16	17.3	18.7
7	14.6	9.3	11.4	12.8	14.5	14.4	15.5	17
8	15.2	9.4	11.8	13.9	14.8	15.1	15.8	17.8
9	15.3	7.9	10.5	11.9	13.6	16	17.9	19.1
10	15.1	8.3	9.9	12.2	13.7	14.9	18	19.5
11	14.4	7.1	9.3	11.3	12.8	14.7	18.3	18.9
12	13.9	7.7	8.9	10.9	12.5	14.5	18.5	16.4
K-6	18.8	13.2	17	17	17.9	18.6	20.1	20.8
9-12	14.7	7.7	9.6	11.6	13.2	15	18.2	18.5
K-12	16.6	10.3	13	14.3	15.5	16.6	18.6	19.5

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table D-23

**Average Pupil-Teacher Ratio
By Enrollment Category
Public Schools
1989-90**

Grade	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
K	27.7	15.8	18.3	22	24.2	28.6	33.4	34.6
1	17.5	13.5	15.4	16.2	16.8	17.6	19.3	18.2
2	17.5	12.8	15.5	16.3	16.9	17.7	19.5	18.1
3	17.9	12	15.4	16	17.5	18.1	20.3	18.5
4	18.2	12.4	16.2	16.3	17.7	18.3	20	19.5
5	17.4	12.8	16	16	17.4	17.5	18.1	18.6
6	17	12	15.5	15.9	17.1	17.2	17.5	18.3
7	15.6	11.6	12.8	14.6	15.9	15.5	18.1	18.6
8	14.8	10.3	12.9	13.4	15	14.7	16	16.1
9	14.4	8.2	10.3	11.1	12.5	15	17.2	18
10	13.2	6.7	9.6	10.5	11.4	13.3	15.8	17.1
11	12.9	7	8.7	9.9	11.3	13.4	16.1	16.3
12	13.8	7	9.2	10.8	12.1	14.2	17.2	17.7
K-6	18.6	12.9	16	16.8	18	18.8	20.4	19.9
9-12	13.6	7.3	19.4	10.6	11.8	14	16.6	17.3
K-12	16.3	10.8	13	13.9	15.3	16.5	18.5	18.5

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Table D-24

**Pupil-Teacher Ratios 1985-86 vs 1989-90
Nonpublic Schools**

N Grade	230 85-86	226 89-90	Difference	% Change
K	28.6	25.7	-2.9	-10.1
1	19.7	19.1	-0.6	-3
2	19.8	19.6	-0.2	-1
3	19.5	19.5	0	0
4	18.4	19.6	1.2	6.5
5	18.3	18.8	0.5	2.7
6	17.2	18.3	1.1	6.4
7	16.3	16.8	0.5	3.1
8	16.6	15.6	-1	-6
9	15.3	14.4	-0.9	-5.9
10	15.5	12.9	-2.6	-16.8
11	15.4	12.1	-3.3	-21.4
12	14.8	12.9	-1.9	-12.8
K-6	19.7	19.8	0.1	0.5
9-12	15.2	13.1	-2.1	-13.8
K-12	18	17.5	-1	-2.8

Source: Basic Educational Data Survey
Department of Education

Table D-25

**Total Instructional Aides in Public School
By Enrollment Category
1985-86 vs 1989-90**

	1985-86		1989-90	
	Number	Pupil/Aide Ratio	Number	Pupil/Aide Ratio
State	2668.6	182:1	3287.8	145:1
<250	40.1	251:1	57.4	185:1
250-399	124.2	233:1	166.9	167:1
400-599	167.5	278:1	211.3	232:1
600-999	249.1	303:1	308.9	214:1
1000-2499	605.9	181:1	822.2	136:1
2500-7499	625.7	152:1	783	118:1
7500 and over	856.1	142:1	938	127:1

Source: Basic Educational Data Survey
Department of Education
Bureau of Planning, Research and Evaluation

Appendix E: Program

Table E-1

**Total Curriculum Units 1985-86
By Enrollment Category**

Statistic	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Average	54.2	39.9	43.8	49.0	51.9	64.6	88.3	152.6
Median	48.8	41.0	43.5	47.5	52.0	62.9	89.1	123.5
Minimum	18.5	18.5	31.0	38.5	39.5	42.3	61.0	91.4
Maximum	291.3	51.5	58.5	65.5	72.5	105.3	122.0	291.3
Range	272.8	33.0	27.5	27.0	33.0	63.0	61.0	199.9

Source: Basic Educational Data Survey
Department of Education

Table E-2

**Total Curriculum Units 1989-90
By Enrollment Category**

Statistic	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Average	59.9	46.3	49.2	53.6	56.2	67.4	94.4	154.4
Median	54.5	45.7	49.0	53.0	55.6	66.3	92.8	120.4
Minimum	29.8	29.8	37.5	39.5	42.0	43.8	67.0	96.0
Maximum	254.0	59.5	63.5	68.5	80.0	100.0	133.5	254
Range	224.2	29.7	26.0	29.0	38.0	56.2	66.5	158

Source: Basic Educational Data Survey
Department of Education

Table E-3

**Average Number of English/Language Arts Units By Enrollment Category
1985-86 vs 1989-90**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
1985-86	6.9	5.0	5.6	6.3	6.6	8.2	11.4	17.7
1989-90	7.7	6.2	6.4	6.8	7.3	8.4	13.1	20.4

Source: Basic Educational Data Survey
Department of Education

Table E-4**Average Number of Math Units By Enrollment Category
1985-86 vs 1989-90**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
1985-86	7.2	6.4	6.4	6.8	7.0	8.0	9.8	12.7
1989-90	8.0	6.7	7.0	7.4	7.7	9.0	11.7	13.2

Source: Basic Educational Data Survey
Department of Education

Table E-5**Average Number of Science Units By Enrollment Category
1985-86 vs 1989-90**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
1985-86	5.6	4.6	4.8	5.2	5.7	6.2	8.1	9.6
1989-90	6.2	5.2	5.3	5.7	6.2	6.5	9.2	11.5

Source: Basic Educational Data Survey
Department of Education

Table E-6**Average Number of Social Studies Units By Enrollment Category
1985-86 vs 1989-90**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
1985-86	4.8	4.2	4.4	4.7	4.8	5.6	6.5	8.8
1989-90	5.6	5.1	5.1	5.2	5.4	5.9	7.2	9.9

Source: Basic Educational Data Survey
Department of Education

Table E-7**Average Number of Foreign Language Units By Enrollment Category
1985-86 vs 1989-90**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
1985-86	3.6	2.1	2.3	2.5	3.2	4.9	9.8	14.9
1989-90	4.9	3.2	3.6	3.7	4.0	6.1	10.9	16.7

Source: Basic Educational Data Survey
Department of Education

Table E-8

**Average Number of Vocational Educational Units By Enrollment Category
1985-86 vs 1989-90**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
1985-86	19.5	13.1	14.7	17.3	18.5	24.1	33.1	70.1
1989-90	18.7	13.1	14.4	16.7	17.6	22	28.8	56

Source: Basic Educational Data Survey
Department of Education

Table E-9

**Enrollment in Calculus by Enrollment Category
1985-86**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Districts	92	6	5	15	21	21	17	7
Total Pupils	2004	24	35	89	200	451	680	525
% Enrolled*	5.6%	2.9%	1.6%	2.5%	3.6%	5.4%	9.4%	6.4%
Boys	1124	14	14	52	110	246	387	301
Girls	880	10	21	37	90	205	293	224

* Estimate based on assumption that all students taking calculus were enrolled in grade 12.
Source: Basic Educational Data Survey
Department of Education

Table E-10

**Enrollment in Calculus by Enrollment Category
1989-90**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Districts	127	5	9	28	23	38	16	8
Total Pupils	2358	18	47	198	247	637	437	774
% Enrolled*	7.0%	3.2%	2.5%	5.1%	5.1%	7.8%	6.6%	9.7%
Boys	1348	10	25	110	141	352	261	449
Girls	1010	8	22	88	106	285	176	325

* Estimate based on assumption that all students taking calculus were enrolled in grade 12
Source: Basic Educational Data Survey
Department of Education

Table E-11

**Enrollment in Trigonometry by Enrollment Category
1985-86**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Districts	134	14	17	26	25	34	11	7
Total Pupils	5107	69	105	242	369	1158	1086	2078
% Enrolled*	13.7%	9.2%	4.6%	6.7%	6.5%	13.4%	14.7%	23.6%
Boys	2781	38	64	131	204	658	583	1103
Girls	2326	31	41	111	165	500	503	975

* Estimate based on assumption that all students taking trigonometry were enrolled in grade 11.
Source: Basic Educational Data Survey
Department of Education

Table E-12

**Enrollment in Trigonometry by Enrollment Category
1989-90**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Districts	133	10	16	32	21	39	8	7
Total Pupils	4392	40	114	372	307	1278	545	1736
% Enrolled*	14.0%	7.8%	6.5%	10.8%	6.8%	17.1%	8.8%	23.1%
Boys	2297	26	54	199	154	680	288	896
Girls	2095	14	60	173	153	598	257	840

* Estimate based on assumption that all students taking trigonometry were enrolled in grade 11
Source: Basic Educational Data Survey
Department of Education

Table E-13

**Enrollment in Chemistry by Enrollment Category
1985-86**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Districts	399	40	73	86	96	72	24	8
Total Pupils	17945	413	971	1678	2896	4031	4283	3673
% Enrolled*	48.2%	55.4%	42.4%	46.2%	51.0%	46.5%	57.8%	41.8%
Boys	9066	204	473	805	1411	2050	2193	1930
Girls	8879	209	498	873	1485	1981	2090	1743

* Estimate based on assumption that all students taking chemistry were enrolled in grade 11
Source: Basic Educational Data Survey
Department of Education

Table E-14

**Enrollment in Chemistry by Enrollment Category
1989-90**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Districts	375	27	64	92	88	73	23	8
Total Pupils	18,272	283	910	1,876	2,971	4,426	3,712	4,094
% Enrolled*	58.1%	54.8%	51.6%	54.2%	65.5%	59.1%	60.0%	54.4%
Boys	8,975	124	471	891	1,421	2,230	1,799	2,039
Girls	9,297	159	439	985	1,550	2,196	1,913	2,055

* Estimate based on assumption that all students taking chemistry were enrolled in grade 11.

Source: Basic Educational Data Survey
Department of Education

Table E-15

**Enrollment in Physics by Enrollment Category
1985-86**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Districts	383	32	71	85	92	71	24	8
Total Pupils	9051	191	683	887	1226	1737	2303	2024
% Enrolled*	24.3%	25.6%	29.8%	24.4%	21.6%	20.0%	31.1%	23.0%
Boys	5511	100	436	542	734	1091	1362	1246
Girls	3540	91	247	345	492	646	941	778

* Estimate based on assumption that all students taking physics were enrolled in grade 11.

Source: Basic Educational Data Survey
Department of Education

Table E-16

**Enrollment in Physics by Enrollment Category
1989-90**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Districts	371	22	65	92	88	73	23	8
Total Pupils	9,043	126	491	981	1,324	1,781	1,981	2,359
% Enrolled	28.7%	24.4%	27.8%	28.4%	29.2%	23.8%	32%	31.3%
Boys	5,416	85	279	569	774	1,096	1,222	1,391
Girls	3,627	41	212	412	550	685	759	968

* Estimate based on assumption that all students taking physics were enrolled in grade 11.

Source: Basic Educational Data Survey
Department of Education

Table E-17

**Enrollment in Foreign Language by Enrollment Category
1985-86**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Districts	428	46	88	93	97	72	24	8
Total Pupils	46791	658	1667	2769	5079	10536	13018	13064
% Enrolled	30.8%	20.4%	18.2%	18.9%	21.8%	30.2%	42.7%	35.9%
Boys	18574	218	558	995	1903	4157	5341	5402
Girls	28217	440	1109	1774	3176	6379	7677	7662

Source: Basic Educational Data Survey
Department of Education

Table E-18

**Enrollment in Foreign Language by Enrollment Category
1989-90**

	State	<250	250-399	400-599	600-999	1000-2499	2500-7499	7500+
Districts	388	29	72	95	88	73	23	8
Total Pupils	62768	871	2950	5858	8713	15414	13041	15421
% Enrolled	46.8%	40.7%	39.4%	39.9%	46.0%	48.5%	50.5%	48.2%
Boys	26607	352	1140	2406	3704	6475	5621	6909
Girls	35661	519	1810	3452	5009	8939	7420	8512

Source: Basic Educational Data Survey
Department of Education